DOCUMENT RESUME

ED 388 520 SE 056 736

AUTHOR Gonzales, Renee; Munguia, Suzanne
TITLE Inventions.
PUB DATE 9 May 95
NOTE 104p.; No introductory text, but contains references to grade 2. Authors are affiliated with Arizona State University (ASU).
PUB TYPE Guides - Classroom Use - Teaching Guides (For Teacher) (052)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Discovery Processes; Grade 2; *Inventions; Primary Education; Science Activities; Science Education; *Science History; Scientists

ABSTRACT

This instructional packet deals with inventions and presents activities that enable students to learn about past inventions and inventors and also create their own inventions in a variety of ways: centers, individual work, and group work. (JRH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

INVENTIONS

ED 388 520

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Suzanne Munguia

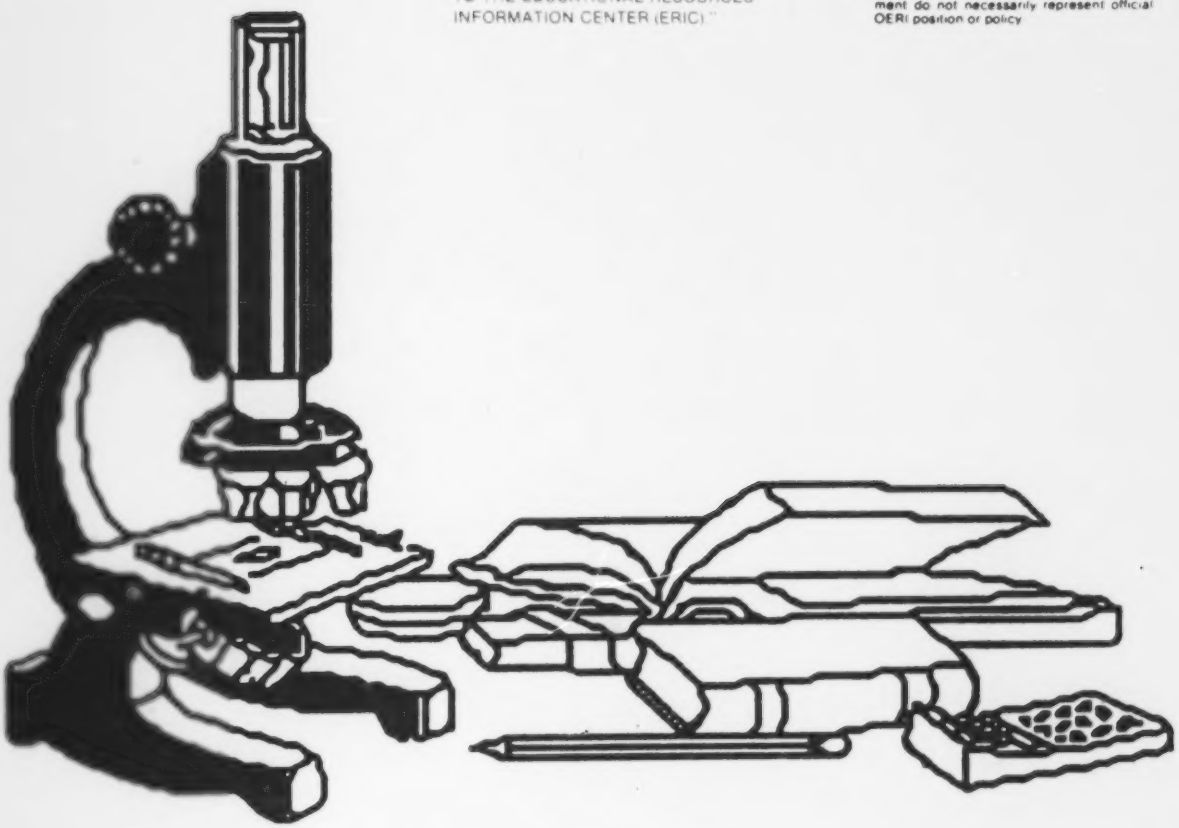
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



BY:

RENEE GONZALES

&

SUZANNE MUNGUIA

BEST COPY AVAILABLE

Renee Gonzales

Suzanne Munguia

UNIT OVERVIEW

TOPIC: INVENTIONS

Expected students outcome for second grade:

I. Reading: The students will be able to

1. identify and locate the title of a book.
2. recognize that titles of all literary works are capitalized.
3. write predictions about story content and verify their predictions of the end of the story.
4. define and identify key vocabulary and their part of speech in context of literature.
5. group themselves with the appropriate vocabulary word they have been given.
6. listen to answer comprehension questions in small groups.
7. listen to identify subtle meanings
8. use descriptive language to express ideas clearly and accurately.
9. demonstrate understanding of content within a variety of listening situations: oral directions, reading/telling of stories, group and class discussions.
10. identify content related words by using clues.
11. categorize content related words from meaningful questions.

12. answer questions and confirm or discomfirm clarity of content by correctly answering probe questions.

13. draws conclusions from evidence through predictions, test predictions against continuing text, and making inferences.

14. identify environmental sounds represented in poetry.

15. identify vowel changes in the words clickety-clackety.

16. learn new vocabulary from context .

17. use content clues to decode new words for pronunciation and meanings of unfamiliar words.

18. locate information by using a Table of Contents.

19. make and confirm predictions about characters in a story.

20. listen as teacher reads a story.

21. identify characteristics of characters in a story.

22. answer comprehension questions regarding the main ideas of the story.

23. sing a song using body movements to express the main ideas of a story.

24. describe what various types of advertisements are promoting.

25. work in cooperative groups and develop an advertisement.

26. explain some elements that are included in an advertisement.

27. point out that advertisements are used in various places.

28. develop an understanding for why inventors advertise their inventions.

29. predict events that will take place in a story.

30. listen and participate in class discussion.

31. identify and respond with cue cards to words ending with /ing/.

32. identify rhyming patterns in context.

33. sing a song dramatizing the main points in a story.

34. write an acrostic poem that follows a correct order.

35. relate authors ideas to their own experiences.

36. read in small groups fro enjoyment and use visual cues to understand the story.

37. follow a set of multiple oral directions.

38. participate in teacher writing activity.

39. compose simple sentences expressing expanded thoughts.

40. listen to discussion to expand their knowledge.

II. Math: The students will be able to

1. develop an understanding of how dates are ordered.

2. work in small groups to represent their results orally to the class.

3. listen to oral directions and complete a task.

4. sequence dates from current to past by following directions.

5. estimate the amount of chocolate chips in one cookie.

6. determine the fewest and the greatest number of chips in cookies.

7. determine the average amount of chocolate chips per cookies on a graph.

8. classify basic shapes.

9. identify shapes in all illustrations

10. participate in a group

11. orally report to class about shapes.

12. develop collage to represent given shape

13. problem solving with pictorial representation.

14. identify and label tangram shapes

15. manipulate tangrams into a given shape.

16. create their own shape with the tangrams.

III. Social Studies: The students will be able to

1. explain the history of each invention and inventor.

2. use the invention in a new or different way.

3. explain what an inventor is.

4. identify a famous American Inventor.

5. describe the inventor's invention.

6. predict events that have happened in an inventors life and confirm them after the story telling.

7. listen to expand their knowledge.

8. retell main points of story in sequence.

9. create an awareness of the importance of inventions in our world.

10. describe different sizes and shapes of trucks.

11. give examples of common uses of truck drivers.

12. discuss safety rules given by truck drivers.

IV. Science: The students will be able to

1. give examples of items that have been invented in our world.

2. Explain what various inventions are used for.

3. create ideas to improve various inventions in our world today.

4. work in small groups and complete an assigned job.

5. collaborate and work together to develop an invention using magazine advertisements.

6. point out how we benefit from new inventions.

7. use descriptors to identify the invention of the wheel.

8. distinguish who can be an inventor.

9. give examples of where inventions can be created.

10. explain characteristics of a good inventor.

11. justify why inventions are created in our world and why they are created.

12. explain invention made at home, success or failure.

13. describe common use of simple object.

14. create new use of simple object invented.

15. recognize that science has changed over a long period of time.

V. Language Arts: The students will be able to

1. write answers to questions on estimation worksheet.

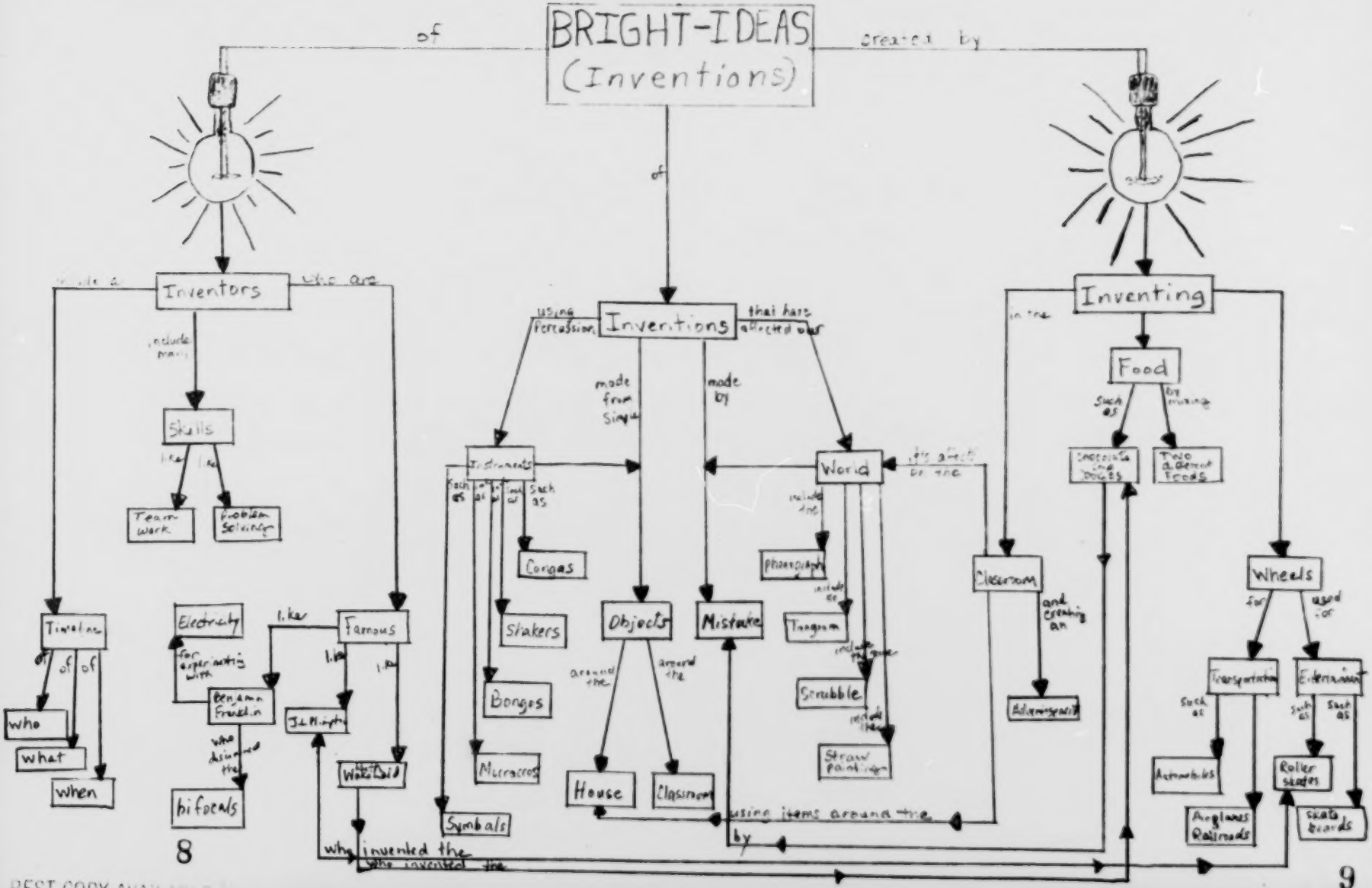
2. write an explanation of the use of the new invention and how the invention affect society.

VI. Spelling: The students will be able to

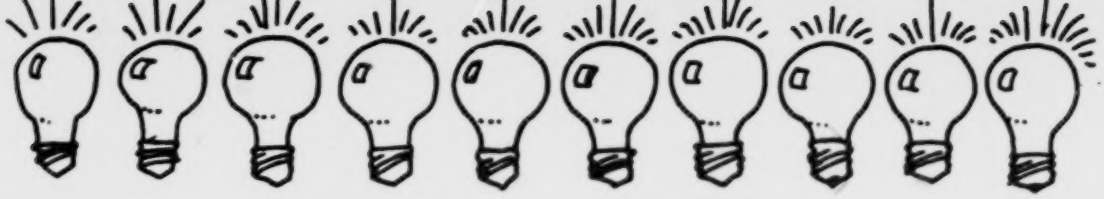
1. spell words that demonstrate these sound-letter relationships:/ou/ ou, ow, orally as a class.

VII. Technology: The students will be able to

1. learn the importance of selling an invented product to the public.



BEST COPY AVAILABLE



INVENTION WEEK

Dear Parents,

This week the class will be learning about inventions. They will be learning and creating their own inventions in a variety of ways --Centers, individual work, and group work. Their completed work will be displayed on a bulletin board and throughout the classroom. You are welcome to come in and view their great work.

As a conclusion to invention week, on Friday we will be video taping commercials for inventions made by groups of students. We are hoping to share this video with you upon it's completion. The homework that is to be completed this week is **Spelling** and one **Parent involved activity** (directions will be sent home on Tuesday). We thank you for all of your cooperation.

Thank You,
Miss Gonzales
Ms. Munguia

BULLETIN BOARD

"BRIGHT IDEAS!"

INVENTIONS

**The students work completed in the centers will be displayed on this board.

CENTERS

LEARNER OUTCOME: At the completion of each activity the students will be able to:

1. explain the history of each invention and inventor.
2. be able to use the invention in a new or different way.

CENTERS:

1. Tangrams
2. Scrabble
3. Paint with straws
4. Record Player

PROCESS:

Each teacher at each center will give a brief history of Activity. The teacher will then have students work on activity. Completed work will be diplayed on "Bright Ideas!" bulletin board.

ASSESSMENT:

Each teacher at each center will assess students by looking at the completed task/activity.

CENTERS

LEARNER OUTCOME: At the completion of each activity the students will be able to:

1. explain the history of each invention and inventor.
2. be able to use the invention in a new or different way.

CENTERS:

1. Tangrams
2. Scrabble
3. Paint with straws
4. Record Player

PROCESS:

Each teacher at each center will give a brief history of Activity. The teacher will then have students work on activity. Completed work will be diplayed on "Bright Ideas!" bulletin board.

ASSESSMENT:

Each teacher at each center will assess students by looking at the completed task/activity.

Learning Centers
(Math-"The Oldest Puzzle")
By: Suzanne Munguia

Lesson: The Oldest Puzzle
Unit: Inventions
Grade: Second

Introduction
This learning center will give a brief history of the oldest puzzle called the, "Tangram". The teacher will read the history to the students and then have a class discussion. The teacher asks for volunteer to identify some of the shapes they see on the puzzle handout. Give each student their own puzzle and allow them to color each shape but the same colors cannot connect. Each shape must have its own color and two of the same colors cannot connect. Have the children cut out their puzzle pieces and build something with the shapes, such as a duck, boat, person, numbers, letters, or a car. After they are finished they put the original square back together.

Materials
Tangram Pattern worksheet
Coloring crayons or pencils
Scissors
Pencil or pen

Learner outcomes
Students will be able to...

1. Name the oldest puzzle.
2. Label different geometric shapes.
3. Follow oral directions.
4. Rearrange geometric shapes to build different designs.

Motivation
Teacher will read the history of the oldest puzzle called the "Tangram". Then the teacher shows the children an example of the oldest living puzzle and asks for volunteers to help identify some of the shapes that have been used in this puzzle.

AIM How could you use the seven different shapes in the Tangram puzzled to make a new design?

Questions/Actions	Anticipated Board Notes
The Oldest Puzzle According to legend, in ancient times a Chinese scholar had a favorite ceramic title that he	

Questions/Actions	Anticipated Board Notes
considered his greatest treasure. One day he was carrying it in his hands when he tripped. The tile smashed into seven pieces on the stone floor. The scholar spent the rest of his life trying to put the tile back together again. The puzzle was named "Tangram" since the scholar's name was Tan. This challenging invention includes only seven pieces, yet hundreds of interesting patterns and shaped can be created with them. The Chinese name for the "Tangram" is "ch'i ch'iao t'u," meaning "ingenious seven-piece plan." The teacher passes out the Tangram Puzzle worksheet to each student. The teacher asks for volunteers to identify some of the shapes that are used in this puzzle. The teacher show the students an example of the Tangram puzzle. Students are given oral instructions to color each of the different shapes a different color. The same color may be used twice, but each shape cannot touch the other. Where every shape meets it cannot touch on the same colors. When they are done then have students cut out the shapes of their puzzle. Allow them to design their own ideas with the shapes. They can rearrange the shapes and make different designs. Talk about what they are making and the different shapes they are using. Next tell the students to reconstruct the original puzzle and put all the shapes back into the square they began with. Let students glue the pieces on a piece of construction paper to display on the wall of the classroom.	

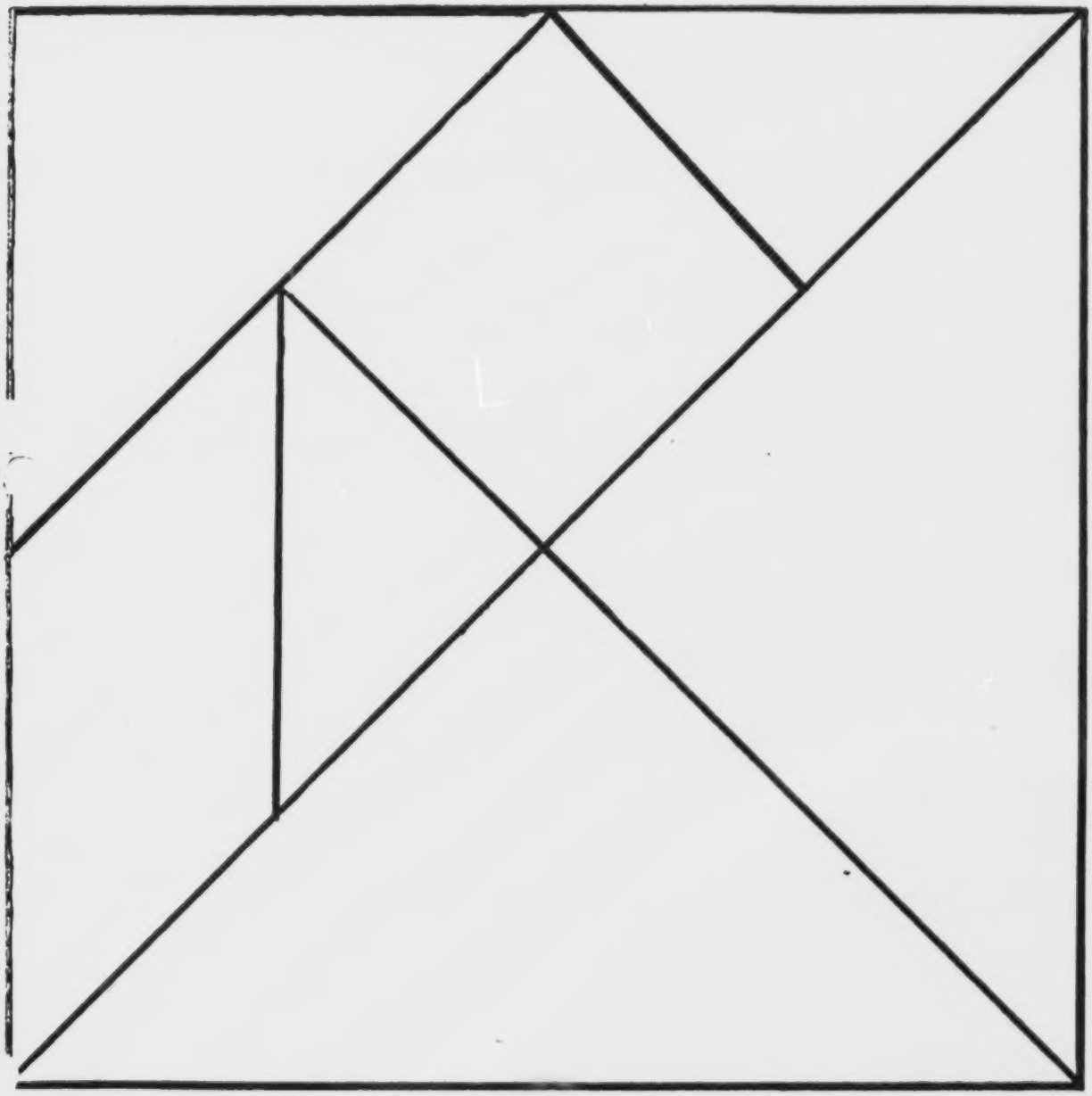
Assessment/Summary

- Ask for volunteers to tell the class what the name of the oldest puzzle is?
- See if anyone could pronounce the Chinese way of saying "Tangram".
- The teacher points to the shapes on the example "Tangram" and asks for volunteers to tell the class the shapes used in the puzzle.
- Teacher would self monitor that each child has made their own design using the shapes and that each student followed the oral directions.

** Spivack, Doris and Geri Blond (1991). Inventions & Extensions High-Interest, Creative-Thinking Activities. TN, Incentive Publications, Inc.

TANGRAM PATTERN

Cut each pattern out of a different color of construction paper. (Children an remember their color and avoid mixing puzzles.) When two or three puzzles re combined, interesting patterns can be formed.



1991 by Incentive Publications, Inc., Nashville, TN.

Learning Centers
(Reading-Scrabble)
By: Suzanne Munguia

Lesson: Scrabble
Unit: Inventions
Grade: Second

Introduction
This learning center will give a brief history of the "Scrabble Game". Using Alphabet cereal each student will spell the word scrabble out and paste it to a piece of construction paper. Using the word scrabble, each student finds how many other words they can spell using only the letters in this word. Students can take the Alphabet cereal and spell out additional words using only these letters and paste them around their word scrabble. The teacher can ask for volunteers to tell us different words that the group came up with.

Materials
Coloring crayons or pencils
Scissors
Glue
Pencil or pen
Construction Paper
Alphabet cereal

Learner outcomes
Students will be able to...

1. Name the inventor of the Scrabble game.
2. Use the letters in the word Scrabble to create different words.
3. Follow oral directions.

Motivation
Teacher will read the history of the "Scrabble" game. Then the teacher shows the children an example of the oldest living game. Teacher asks students if they ever played this game before? If they do ask for someone to explain how the game works. What is the purpose of the game?

AIM How many different words can you make out of the word Scrabble?

Questions/Actions	Anticipated Board Notes
Word Games The popular Scrabble game was invented by Alfred M. Butts, a New York City architect, in 1948. He got his idea from playing the old game of Anagrams which was played as long ago as the Middle Ages!	

Questions/Actions	Anticipated Board Notes
In Anagrams, the letters in a word or phrase are rearranged to form another phrase. (Example: "they see" becomes "the eyes.") Mr. Butts liked arranging letters so much that he designed Scrabble (word combinations formed on a board with wooden letters). There are many Scrabble clubs all over the world and the game is available in every language! Give each child a piece of construction paper and let them use the Alphabet cereal to spell the out the word Scrabble in the middle of the paper. Using this word they may make other words. Let them use the Alphabet cereal to make these words. Paste the different words around the word Scrabble. See how many words they can come up with. Each letter can only be used once, and names cannot be used. Talk about or chart all the different words that can be made from the original word Scrabble. Ask each child to volunteer one of their words.	Scrabble Words car, crab, scar, care, bear, cable, race, case, base, seal, bar, lace, brace,

Assessment/Summary

- Ask for a volunteer to tell the group who invented the Scrabble game?
- Ask for volunteers to tell the group how many different words they came up with? See who came up with the most words.
- Teacher charts all the different words that could be made.
- Student and teacher repeat all the different words.
- Teacher will observe group to see they are following the oral directions.

** Spivack, Doris and Geri Blond (1991). Inventions & Extensions High-Interest, Creative-Thinking Activities. TN, Incentive Publications, Inc.

CENTER
PAINTING WITH STRAWS

MATERIALS:

straws(one for each student)
construction paper
3 colors of poster paint
newspaper (to cover the table and floor)

HISTORY:

The straw was invented at about 1889 by Marvin Stone. The reason for his invention came about when he wanted to make a drink called Mint Julep taste better. The straws at that time were made out of common wild grass. When you drink from a grass straw you could taste grass not you soda.

Stone decided to make an artificial straw that didn't affect the taste of drinks. His first straw was made out of long thin strips of paper wrapped around a pencil and glued at each end to keep the paper from unwinding. He kept working on the drinking straw will 1890. By this time Stone had his employees (workers) at the Stone Factory making straws a little like we use today.

ACTIVITY:

1. Give each students a piece of construction paper
1 straw and 2-3 colors of paint on there construction paper (small amount).

2. Place one end of the straw close to some paint.

3. Have student blow through the end of the straw lightly.

4. Put name on paper and set to dry.

5. Give picture a title.

*** Put completed, dry picture on "Bright Ideas!" bulletin board.

CENTER
DISC RECORD PLAYER

MATERIALS

stick pins (one for each child)
construction paper
pencils (6)
tape
1 record
picture of Disc record Player

HISTORY

In 1887 Edison's phonograph showed sound recording was possible but it was quiet(low volume) and it put out poor sound (distorted). But German born American Emile Berliner made a better system in 1888. He used a disc and instead of recording on them directly he made a master disc. From this he could make more by pressing on wax cut records like the one I have here today.

ACTIVITY

1. Roll construction paper into a cylinder. (start at one corner and roll)
2. Tape cylinder.
3. tape one stick pin, pointing down ,to the cylinder.
4. Demonstrate amplification with finger tip.(rub finger against pen.)
5. Put tape around pencil (eraser area) to make thick enough to fit in record middle.
6. Demonstrate how it spins.
7. Now, have students hold pin on record while you spin record.

Can you hear the music on the record?

GRAMOPHONE SOUND TRACINGS

GRAMOPHONE REPRODUCER, 1889

GRAMOPHONE RECORDER, 1888

BEST COPY AVAILABLE

Secret Word

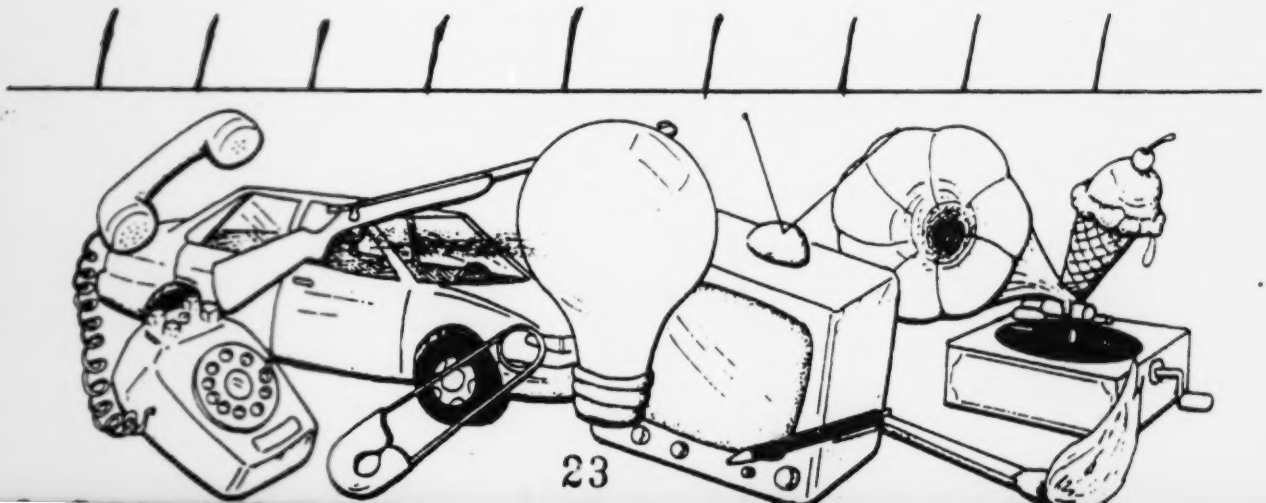
Name: _____ Date: _____

Directions:
Add. Then use the code. Match your answers with the letters. Write the letters on the line.

Code:

E	N	T	I	S	O	V
96	75	67	200	425	360	133

132	50	89	61	64	39	101	294	41	215
+ 68	+ 25	+ 44	+ 35	+ 11	+ 28	+ 99	+ 66	+ 34	+ 210



Make An Invention
(Science Lesson)
By: Suzanne Munguia (ERIC)

Lesson: Make An Invention
Unit: Inventions
Grade: Second

Introduction
Students are going to be introduced to inventions in our world. Groups will be formed and each student assigned a specific job in the group. Each group will create their own invention.

Materials
Paper and pencil
Scissors
Glue
Magazines
Miscellaneous material provided by the teacher
Hand Out called Group Project
Hand Out called Our Invention

Learner outcomes
Student will be able to...

1. Give examples of items that have been invented in our world.
2. Explain what various inventions are used for.
3. Create ideas to improve various inventions in our world today.
4. Work in small groups and complete an assigned job.
5. Collaborate and work together to develop an invention using magazine advertisements.
6. Point our how we benefit from new inventions.

Motivation
Teacher uses items to introduce inventions unit (can opener, cars, camera, blue jeans, dictionary, peanut butter, etc.). Ask questions pertaining to these items:

1. What is this item?
2. What it is used for?
3. What was used before this was invented?
4. How has this invention changed the world?

Ask students if they know of any other inventions?

AIM How do we benefit from inventions?

Questions/Actions	**Anticipated Board Notes**
Group students (5 to a group). Randomly select each group. Then have index cards with group number and job position. There should be a description of the job on each group members card. A. Record Keeper B. Materials Person C. Designer D. Assistant to the Designer E. Finisher	
Go over individual job positions.	Assigned Duties In Groups #1: Takes notes about ideas #2: Gathers needed materials #3: Puts invention together #4: Helps designer #5: Group # on and shelves it
(Pass out worksheet called, "Group Projects".) Tell students it is a checklist for monitoring that everyone in the group has a job. Let them know they will be required to turn this worksheet in at the end of the lesson. Ask if there are any questions so far? Tell the materials person in each group to get a few magazines for each group, some scissors, piece of paper, and glue. Have children cut out inventions from the magazine. Each child must chose at least two inventions (pictures) from the magazine. Paste pictures on the paper. Build a collage of pictures. (allow at least 10 minutes). Make sure students save these pictures for the next project. Each group is to take two pictures from their collage and try to construct their own invention. Putting these two machines or ideas together to create one. Examples: 1. Washer and Dryer in one 2. Microwave and can opener	

Questions/Actions	Anticipated Board Notes
3. Pants and shoes 4. Chocolate chips and bread 5. Telephone and door opener Groups are to create a new invention. Have materials person from each group come up to the front of the room. Teacher hands out bags of items to use to create their inventions. (Saved items by the teacher include: cereal boxes, cups, cans, beads, toilet paper rolls, noodles, and any other things collected.) (Allow at least 20 minutes for groups to create inventions) Tell students that they each have a job in the group. Everyone needs to work together and create their group invention. Make sure students can explain how they came up with the idea, how their invention works, a name for their invention, and how it improves the world? Teacher passes our the worksheet called, "Our Invention". Tell students each group must fill out one worksheet and hand it in at the end of the lesson. Let students know that the following day we will be talking about our inventions and what makes a good inventor!	

Assessment/Summary

- Each group hands in a worksheet called, "Group Project".
- Each group hands in a worksheet called, "Our Invention".
- Each group hands in a collage of their magazine inventions that they found (two per person).
- Each group should have one invention that they created.
- Teacher talks to the class about what they have learned. The teacher asks for volunteers to answer the following questions:

  1. Can any one give me an example of an invention that has improved our world? and How has it improved our world?
  2. How do we benefit from new inventions?

Adaptations

Irene	Her job would have to be translated in Spanish Assign job as materials person, assistant designer, or the finisher Allow her to work with a peer buddy Can make up a Spanish name for her groups invention
Judy	Pair her with a peer buddy Assign job as materials person or the finisher Ask simplistic questions of her Assess that she has written her name on the Group Project worksheet Can point out some inventions in the magazine and the peer buddy could cut them out for her. Will be able to name three inventions in our world. Will be able to alphabetize the members in her groups names. Will be able to orally state that names start with capital letters. Will be able to point to the part of the worksheet "Group Projects" where all the students put their names. Identifies the section called "Name" Recite how to spell the name of her groups invention.
Kitty	Peer buddy to help read instructions Present her job orally as well as written Through observations and questioning confirm she understands the directions along the way. Teacher observes students progress and asks her questions along the way.
Jake	Let him chose his position Allow him to chose if he behaves accordingly Monitor interaction with group both self and the teacher Through observation offer him free recess time every ten minutes for appropriate behavior. Praise and positive comments when appropriate behavior is being used.
Johnny	Have him write about his invention Let him research famous inventors Draw a poster of his invention Allow him to make his own modifications to make an invention better Will be able to orally explain to the teacher how his invention was created and what it does. Let him read a book about an inventor

Group Project

Group Number:_____Date:_____

Job Title	Name	Signature
Record Keeper Takes Notes Fills Out Forms		
Materials Person Gathers Materials		
Designer Puts Materials Together Gets Input From Group		
Assistant To The Designer Helps The Designer		
Finisher Writes Group Number Puts Inventions On Shelf		

Comments About Group Working Well Together?

****Attach Inventions Questioneer and Magazine Collage.**

cc: MSWorks/JOBS By: Suzanne Munguia

Our Invention

Group Number:_____ Date:_____

How we did we come up with our invention idea?

_____

_____

_____

The name of our invention is?

_____

This is how our invention works and what it does?

_____

_____

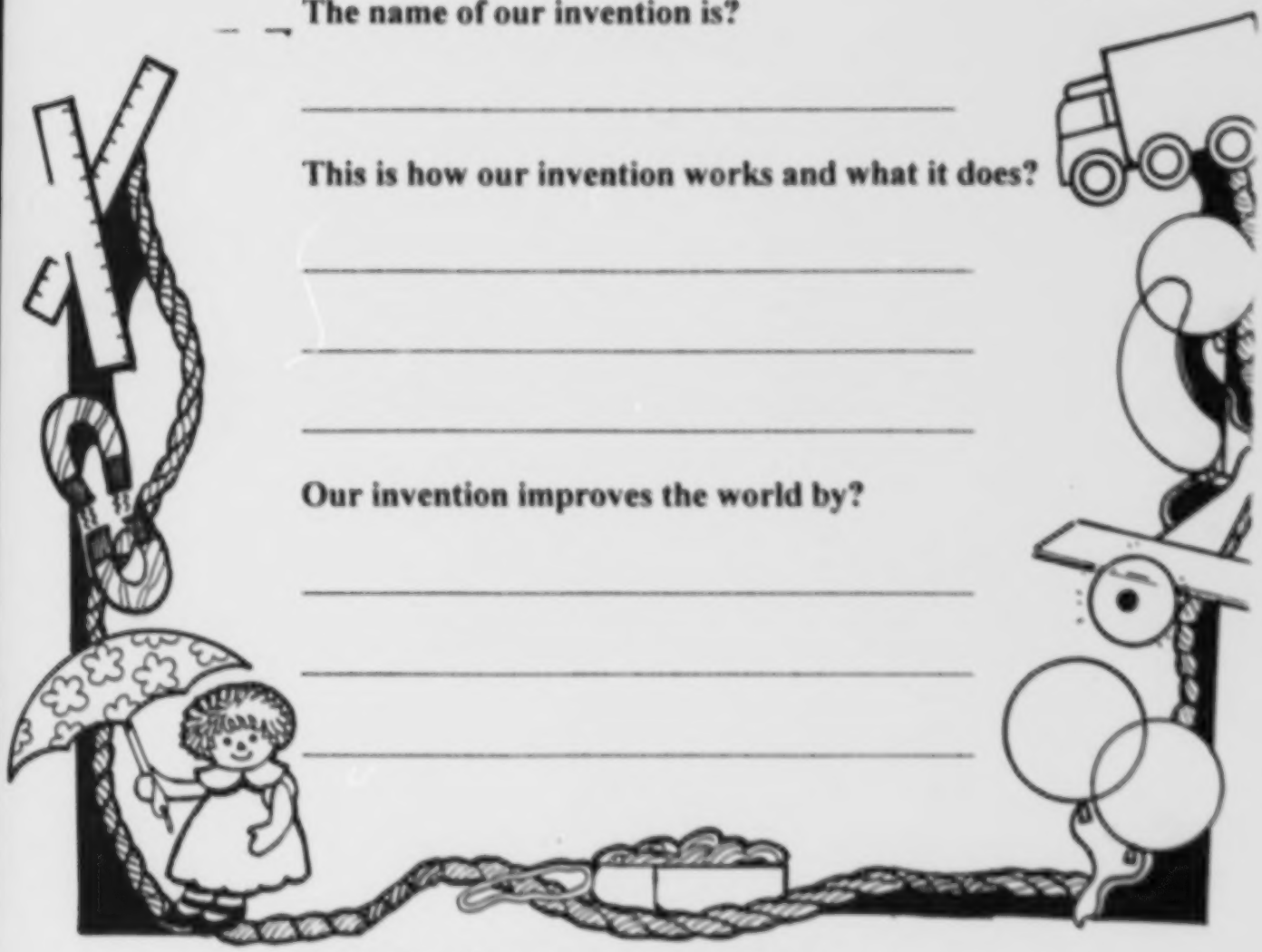
_____

Our invention improves the world by?

_____

_____

_____



cc: MSWORKS/LESSON1A By: Suzanne Munguia

Lazy Tommy Pumpkinhead
(Reading)
By: Suzanne Munguia (ERIC)

Lesson: Tommy's Invention
Unit: Inventions
Grade: Second

Introduction
Key words are pronounced and defined in class. Students are asked to write down predictions about what the book is going to be about. Teacher will read the story and answer comprehension questions in small groups. Predictions will then be verified.

Materials
Book Lazy Tommy Pumpkinhead, by: William Pene Du Bois
Paper and pencil
Comprehension questions given by the teacher

Learner outcomes
Students will be able to...

1. Define and identify key vocabulary and their part of speech in context of literature.
2. Write predictions about story content and verify their predictions at the end of the story.
3. Group themselves with the appropriate vocabulary word they have been given.
4. Listen to answer comprehension questions in small groups.
5. Listen to identify subtle meanings.
6. Use descriptive language to express ideas clearly and accurately.
7. Demonstrate understanding of content within a variety of listening situations: oral directions, reading/telling of stories, group and class discussions.

Motivation
Ask for a volunteer to read the title of the book, Lazy Tommy Pumpkinhead. List vocabulary words on the board and tell students, "Today we are going to learn some new words and their meanings". Ask for volunteers to chose a word from the list and pronounce the word and give the class a definition or what the word means. Teacher should probe students for the answers and not just give the answers. Use key sentences or other words that can probe their understanding to come up with the words.

AIM Was Tommy's invention a good one and why?

Questions/Actions	Anticipated Board Notes
	Vocabulary Words Trapdoor (Secret Door)

Questions/Actions	Anticipated Board Notes
	Harness (Holds body together Chute (Hole that things threw) Headfirst (Falling down headfirst) Explode (Blow up bake a cake) Landslide (Tumbling over) Faded (Gets softer looses sound)
Have children pull out a piece of paper and write down two predictions about what they think this story is going to be about. Hint to them to use the name of the book and the vocabulary that we just went over. (Allow about ten or fifteen minutes to write them down). Before reading the book tell students that you are not going to show the pictures as you read. You want the students to visualize the pictures in their head. Tell them to amagine what the invention or Tommy looks like while we are reading the story. Teacher reads 5 through 12. Put students into small groups (group themselves with the same vocabulary words). Then have an assigned duty for each member in the group. Such as the word trapdoor has five index cards. Out of the five cards they could read: trapdoor (picks up card) trapdoor (reader) trapdoor (speaker) Make sure all students participate. If more students in a group exist then have them share duties. Give 2 comprehension questions per group. (Allow 10 minutes for discussion). Ask the assigned speaker of each group to orally present their answers to the class. <u>Questions are:</u> Group #1 Who is the main character in the story? (Lazy Tommy Pumpkinhead) Why do you think he created his invention? Group #2	

Questions/Actions	Anticipated Board Notes
What was his invention used for? (To get up, bath, dress, and eat in the morning) Do you think this invention saved him time? Why or Why not? Group #3 What did the tooth-brushing machine do for Tommy? (Squeeze toothpaste on his teeth and scrubbed them). Would you like to tooth-brush machine? Why or why not? Group #4 What happened when Tommy slide down the chute? (Slide into his shirt, pants, socks, and shoes) If this was your invention how much do you think it would be worth in dollars? Group #5 After Tommy was done eating, what did the machine do for him? (Wiped his face with a napkin). Tommy was full after eating such a big breakfast. What other way could Tommy use to go up the stairs? (elevator, escalator, pull string). Teacher continues reading pages 13 through 28. Don't forget, NO PICTURES! Tell groups to pass their index card to the group member on their right. This way the group can change roles or jobs. Have groups answer two more questions about the story. Allow the speaker to present their answers orally to the class. <u>Questions</u> Group #1 After the thunder and lightening, what happened to Tommy's invention? (wires broke, shut down? If your invention stopped working, what would you do? Group #2 How many days did Tommy sleep when his invention did not work? (4 days and nights) Do you think he was hungry after all that sleep?	

Questions/Actions	Anticipated Board Notes
How much might Tommy eat after all that sleep? Group #3 Why did Tommy jump out of the water after the electricity went back on? (cold water). If you had to take a bath in cold water or take no bath at all, what would you do? Group #4 What happened when Tommy jumped out of the bathtub because the water was too cold? (slipped down the trap door head first). Is there another way that Tommy could of heated up the water? How? Group #5 Instead of feeding his stomach with food what did the machine feed with food? (his feet). If this happened to you, what might you have done to save the food? Teacher finishes reading the story. Have groups pass their index cards to the person to their right. Pass out the last two questions for each group to answer. Let the speaker present their groups results orally to the class. <u>Questions</u> Group #1, #2, and #3 What does Tommy mean when he says, "I really must turn over a new leaf before it is the end?" Group #4, and #5 Why do you think they called the boy "Lazy Tommy Pumpkinhead?" Ask students if they thought Tommy's invention was a good one or not. Can take a class vote. Tell students to draw a picture of Tommy's invention or what Tommy might look like. After they are done drawing their picture let them look at the actual picture of him in the book.	

Assessment/Summary

- Defining and identifying key vocabulary will be assessed as we go through the words in the beginning of the story.
- Tell students to confirm their predictions they had written down in the beginning of the story.
- On their predictions paper they need to write down the vocabulary word that was for their group and define it on the bottom of their paper.
- Teacher will observe their group activity and that the comprehension questions are answered correctly. If children are wrong the teacher will discuss the questions further. Assessement of their understanding of the story will take place through class discussion.
- Students will visualize what Tommy and his invention look like. After they have drawn their own ideas then they can check the book to see how close they were to the real thing.

Adaptations

Irene
Instructions in Spanish.
Possible tape recorded version
Peer buddy
Key words in Spanish

Allowed her to prepare five days prior
Allow another student to transcribe her predictions and verify them.
Key words on the vocabulary in Spanish
Comprehension cards key words in Spanish

Judy
Peer buddy transcibe and write down her predictions
Peer buddy make sure she wrote her name on her paper and capitalized it.
Give her picture clues to follow as the story is told.
Have her point to the title and author of the book.
She could alphabetize the vocabulary words.
Tape record reading for her to listen to at a later time.
Draw a picture of Lazy Tommy Pumpkinhead.
Tell teacher orally her version of the story.
Tell peer or teacher the letters in her name and say her name.

Kitty
Allow her to review several days prior
Peer buddy to discuss reading with her
Peer buddy could read back her predictions and help her confirm them.
Teacher questions her on where the title is located and why it is capitalized.
Give her vocabulary words to study the night before and let her know you will call on her for one particular word to define it and use it in a sentence.

Jake	Monitor behavior in group setting Give a job of organizing ideas or monitor group behaviors Teacher will monitor his writing and make sure it is neat and spelling is correct and title is capitalized and centered on his paper. Let retell the story to a peer.
Johnny	Have make up his own story of an invention Let tape record reading for other students to hear Make a picture of the invention and the process of it Develop a few higher order questions for him to answer. Write about why he predicted what he did. Let predict throughout the whole story by using the pictures first, then go through and verify his predictons. Tell the story himself using the pictures then compare his version with the real story. Let read another story.

LAZY TOMMY PUMPKINHEAD

Lazy Tommy Pumpkinhead
(Reading Group Cards)
By: Suzanne Munguia

trapdoor	harness	headfirst
trapdoor	harness	headfirst
trapdoor	harness	headfirst
trapdoor	harness	headfirst
trapdoor	harness	headfirst
trapdoor	harness	headfirst

landslide faded

landslide faded

landslide faded

landslide faded

landslide faded

landslide faded

Inventions Timeline
(Math)
By: Suzanne Munguia (ERIC)

Lesson: Invention Timeline
Unit: Inventions
Grade: Second

Introduction
Teacher uses examples of different dates and asks for volunteers to tell us how we verbally would say these dates. Talking with students about their position in the sequence of numbers. Students will be in small groups and act out their numbers. Teacher will pass out a timeline of inventors and their inventions. Students will be instructed to put themselves in order from the most current date to the earliest date of a particular invention. A worksheet called, "Putting The Dates In Order" will be passed out for the students to put the dates in order.

Materials
Paper and pencil
Teacher provides timeline cards with dates
Worksheet called "Putting The Dates In Order".

Learner outcomes
Students will be able to...

1. Develop an understanding of how dates are ordered.
2. Work in small groups to present their results orally to the class.
3. Listen to oral directions and complete a task.
4. Sequence dates from current to past by following directions.

Motivation
Teacher writes two dates on the board and talks about them. Teacher tells class they are dates, how they are written, notice if one comes before the order or which one is closer to 1994 and which one is farther away from 1994? Ask for a volunteer to explain the difference between saying the dates and saying the numbers? Talk about how you can tell if a number comes before or after another number. A volunteer could tell class that each number has a position name, such as one's, ten's, hundred's, and thousand's. Let class know we don't use place names when we use dates. Orally the two different ways of saying these are by numbers and dates. Students are grouped and assigned a date. Groups act out their numbers and present orally to the class.

AIM What is orally different when we say a date or we say a number?

Questions/Actions	Anticipated Board Notes
Teacher passes out cards with timeline dates to each child. Instructions are: 1. Quietly get into a big circle 2. The only words they can say to each other is the year on their card. 3. Tell students the largest or most current date should start here and the smallest number should be at the end of the line. 4. The only words we should hear are dates. 5. Students put themselves in sequence starting with the current date. 6. Tell them when to go. After the class thinks they are in order. Have students say their invention and the year it was invented orally starting with the oldest date. Teacher checks to see sequencing is correct. Let students pin their light bulbs on the invention timeline in order from the oldest to the newest invention.	

Assessment/Summary

- Teacher monitors group presentations about sequencing numbers.
- Teacher observes that students are following directions and put themselves in the proper order from smallest to largest numbers.
- Teacher asks the class how we can tell if a number comes before or after another number?
- Ask for a volunteer to tell us what would be the difference between something invented in the 1800's and something invented in the 1900's?
- Pass out the worksheet called, "Putting The Dates In Order". Have students complete this worksheet independently.

Adaptations

Irene — Directions presented in Spanish
Key words in Spanish
Peer buddy help her orally present her date, light bulb, and worksheet.

Judy	Peer buddy help with presentation, light bulb, and worksheet. Identify different dates and how they are orally presented. Peer buddy help her in inventions date line with class. Have write her name on the worksheet. Have her point to the dates and how they should be sequenced. Peer buddy could question her to with two dates and which one comes first. Have her re-write numbers in order on her own paper. Index cards with various dates for her to put in order. She could alphabetize some of the inventions by names.
Kitty	Peer buddy read her the directions Worksheet will have to be explained both orally and written
Jake	Monitor behavior and group work Monitor attitude and participation. Let him pick his partner to do group presentation Meet with teacher after lesson and discuss behavior and attitude and following directions.
Johnny	Allow him to direct where the light bulbs are pinned on the timeline. Do a report on one of the inventions Read about a invention Do a graph of the results. Alphabetize the inventors Pick which invention he liked best and why. Chose an invention and talk about how it has impacted the world.

Timeline of Inventions

By: Suzanne Munguia

1753
Benjamin Franklin
Lightening Rod

1780
Benjamin Franklin
Bifocals/Glasses

1782
Montgolfier Brothers
Hot-Air Balloon

1800
Alessandro Volta
Battery

1801
Richard Trevithick
Steam-Powered Vehicle

1816
Karl Von Sauerbronn
Bicycle

1823
Reverend Samuel Hall
Blackboard

1834
Daniel Chapin
Matches

1839
Louis Daguerre
Camera

1843
John Horsely
Greeting Card

1846
Thomas Hancock
First Solid Rubber Tire

1853
Charles Frederick von Gerhartl
Aspirin

1858
Erza J. Warner
The Can Opener

1863
J. L. Plimpton
Roller Skates

1863
Ebenezer Butterick
Tissue Paper Dress Patterns

1872
Luther Crowell
Paper Bag

1876
Alexander Graham Bell
Telephone

1877
Thomas Edison
Phonograph

1888
Marvin Stone
Drinking Straw

1888
John Dunlop
Tires With Air-Filled Inner Tubes

1891
James Naismith
Basketball

1892
Whitcomb Judson
Zipper

1893
G. W. Gale Ferris
Ferris Wheel

1903
Wright Brothers
Airplane

1913
Clarence Crane
Life Savers Candy

1920
Earl Dickson
Band-Aid

1926
John Logie Baird
Television

1930
Papa Christiansen
Lego Blocks

1931
Alfred M. Butts
Scrabble Game

1933
Charles Darrow
Monopoly Game

1933
Ruth Wakefield
Toll House Chocolate Chip Cookie

1957
WHAM-O Company
Frisbee

1957
Willem Kolff
Artificial Heart

1965
Mary Quant
Miniskirts

1972
Ralph Baer
Video Game
Ping Pong

1979
Erno Rubik
Rubik's Cube

Putting The Dates In Order

Name: _____ Date: _____

Directions:
Put the following dates in sequencial order from the oldest date to the most current date.

1775	1994	1884
1721	1800	1915
1962	1844	1666

Oldest Date 1. _____

2. _____

3. _____

4. _____

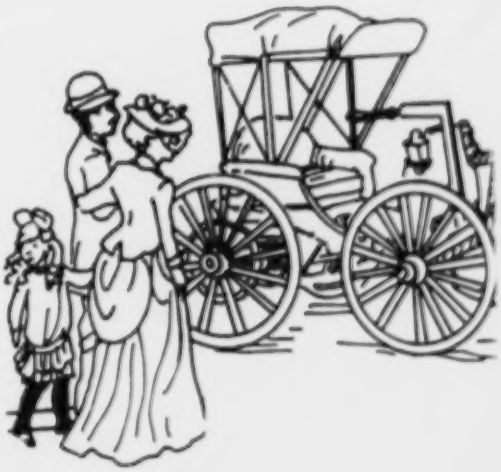
5. _____

6. _____

7. _____

8. _____

Most Current Date 9. _____



cc:MSWORKS/Lesson3A By: Suzanne Munguia

Shakers
(Music/Art)
Shakers for Demonstration

Materials:

empty toilet paper rolls.

pre-cut construction paper to cover toilet paper roll

(rectangle and circles)

crepe paper stripes.

glue

uncooked rice and pinto beans

Directions:

1. Glue rectangle strip on tubes to cover roll.
2. Glues a circles on one end of the tube.
3. Pour a small amount of beans and rice into roll.
4. Glue a circle on the other end of the tube.
5. Glue on crepe paper to the ends for decoration.

NAME _____ Unit 31 /ou/ in out

Seek and Find

s o u n d x x h o u s e x h o r s t o x
o f l o w e r x t o w e r o a b o u t x
u o t w t o w n u n o w x u h o w a b o
n u o l o r o o o a b o u s r o u n d o
d n w g r o u n b h o u s e c l o w n x
x d e m o u s e a a b o u t x t o w n x
o u r x u d n u o f x r e w o l f o u r
a b o u t f l o w e r x t o w e r o w l

house _____ _____ _____ _____ _____

about _____ _____ _____ _____ _____

flower _____ _____ _____ _____ _____

found _____ _____ _____ _____ _____

our _____ _____ _____ _____ _____

out _____ _____ _____ _____ _____

how _____ _____ _____ _____ _____

now _____ _____ _____ _____ _____

tower _____ _____ _____ _____ _____

town _____ _____ _____ _____ _____

Bonus Words

clown _____ _____ ground _____ _____

mouse _____ _____ sound _____ _____

round _____ _____ owl _____ _____

BEST COPY AVAILABLE

INVENTORS NAME ACTIVITY
NAME TAGS

MATERIALS:

Pre-cut and laminated light bulbs
list of inventors name and accomplishments
markers

PROCEDURE:

1. Have students look at the time line of inventors on board.

2. Each student is to choose an inventors last name to add to their name and diplay their name on their desk during Invention Week.

My Invention
(Science)
By: Suzanne Munguia (ERIC)

Lesson: My Invention
Unit: Inventions
Grade: Second

Introduction
Class will play a game called guess this invention! Teacher then talks about what an inventor can look like, who could be an inventor, where inventions can be created, and characteristics of inventors. The class continues by defining what is meant by characteristics of inventors.

Materials
Paper
Markers/Pencil/Crayons

Learner outcomes
Student will be able to...

1. Use descriptors to identify the invention of the wheel.
2. Distinguish who can be an inventor.
3. Give examples of where inventions can be created.
4. Explain characteristics of a good inventor.
5. Justify why inventions are created in our world and why they are created.

Motivation
Play a descriptors game called, Guess The Invention! Teacher describes an invention and the students guess what the invention is. The following can be used as an example:

1. I am thinking of an invention that is round or circular in nature?
2. This invention is used to move things around.
3. This invention has been around for a long time.
4. Every car has four of these?
5. Most bicycles have two of these?
6. Today they are made out of rubber. (Wheels)

AIM What does it take to be an inventor?

Questions/Actions	Anticipated Board Notes
Ask children what skills inventors use when they create their inventions?	

Questions/Actions	**Anticipated Board Notes**
Have children brainstorm ideas (Teacher can write ideas on the board).	Skills Our Groups Used Suggestions/Opinions Group work. Asking Questions Taking Notes Discussion Making Creativity Compromising
Ask for volunteers to tell the class who can be an inventor?	
Teacher leads the children to say:	An Inventor Can Be? Boys/Girls Young/Old Mom/Dad Anyone
Ask students where inventions are created? Lead the children to say:	Inventions Can Be Created In? laboratories Science Rooms Garages Bedrooms Kitchens At a Table Outside By the Railroad At School Anywhere
Explain to children that we have decided who can be an inventor, and where an invention can be made. Know we need to talk about the characteristics of a good inventor.	
Teacher asks for a volunteer to tell the class what is meant by a characteristic of an inventor? (Teacher guides class by saying if an invention does not work the first time do inventors just say forget it and stop?)	
Ask for volunteer to tell the class what they think are some characteristics that make a person an inventor?	Inventors Are? Curious about the world Obtain a positive attitude

Questions/Actions	Anticipated Board Notes
	Work hard Not quitters Problem solvers Confident to be successful Like to put the puzzle pieces together
Inventors use all these characteristics to create good inventions.	
Ask several children to define what an invention is?	An Invention Is? Something people make Unique and never used before
Definition of invention:	Invention An invention is something that is devised/made by human effort and that did not exist before.
Ask for volunteers to explain why inventions are important to our world? Ask why are inventions created? (Make work easier, reduce time, cooking becomes easier, machines work faster, less labor is needed, money is saved, quicker speed to process information, saves time, improves our world).	

Assessment/Summary

Teacher has a class discussion and asks some questions:

- Using the skills we just learned can anyone tell me a skill that inventors use when they are creating their invention?
- How many students have decided that inventors can be boys, girls, or anyone?
- Who can tell us where inventions are made?
- Each student picks what they believe to be the three most important characteristics of an inventor and write them down on a piece of paper. They must order them from most important to the least one of importance.

Adaptations

Irene — Pass out a study guide for her to follow, key words in Spanish
Tape record lecture ahead of time and allow her to preview a few days before the lesson is taught.

	Tell her questions you will ask her during class to answer ahead of time. Allow her to work with a peer buddy.
Judy	Student can write her name on the back of the poster and a peer check for accuracy. Teacher can ask her some questions or assign her to study two questions that will be asked of her in class the day of the lesson. Teacher checks that she wrote her name properly on the written assignment and peer buddy can help her. Peer buddy could write down her choices of the characteristics and ask Judy what letter each word starts with. Tell teacher orally an inventionr that has impact on our world Have her alphabetize the three characteristics she chose. Be able to write down the word invention and pronounce it properly.
Kitty	She should be fine.
Jake	Have self monitor behavior Ask him when you need a volunteer Allow him to help other students Could do the transcibing for students who are having trouble. Teacher can praise and compliment him when acting appropriately.
Johnny	Have him explain an invention that has improved our world. Develop a few higher order questions for him. Teacher could talk to him after and see what he knows about inventions. Let him explain an invention and how it has improved the world.

Splash activity
(Science)
Take Home Activity

Name: Renee Gonzales

Theme: Inventions

Concept: Take home activity with food

Grade: 2

Learner Outcome: At the end of the lesson the students will be able to:

1. explain ~~their~~ inventions made at home success or failure.

Materials:

any two foods put together to create a new food.

take home activity worksheet

Motivation:

Today's homework will need to be done with help from your parents or older relative. The materials that you will need are already in you kitchen at home. You and your parents are to invent a new food by combining two foods. Can any one tell me what two food have already been put together to make a new food.**(Examples: macaroni and cheese, peanut butter and jelly, spagetii sandwich, and chocolate chips with cookie dough)** Call on students randomly. All of you must complete this assignment at home and return your handout with a description of you and your parents new food invention. All of you must complete this assignment by April 1995 because we

will share it with the class on _____. All of you who bring it back on time will receive credit for completion and a prize.

Assessment:

Go over activity with the class when assignment is returned on April 1995. Have students explain their invention and if it was a success or failure.

Dear Parents,

Thank you for participating in this fun experiment at home. Your cooperation will help your child get a better understanding of inventions and the process of finding out how things work.

Please be sure to do this activity with your child and sign the designated area. Your child will be rewarded for this when returned on April , 1995.

Thank You,

Miss Gonzales

Ms. Munguia

CHILD'S NAME:_____

INSTRUCTIONS:

Look in your kitchen and think about **two foods** that can be put together.

Brainstorming ideas:

1. _____
2. _____
3. _____
4. _____

Now combine some of your ideas and write down your conclusions:

1._____

_____

2._____

_____

3._____

_____

Were your new inventions a success or does it need more work?

_____

_____

PARENTS SIGNATURE:

_____

Fox on Wheels
(Reading)
By: Suzanne Munguia (ERIC)

Lesson: Fox on Wheels
Unit: Inventions
Grade: Second

Introduction:
The concept of wheels links in with our thematic unit on inventions. This lesson begins with a short story to introduce new vocabulary. The teacher and class will continue by reviewing the new vocabulary they learned in the story called The Race. The lesson continues with an introduction to the book, Fox on Wheels. Children will make predictions about the story and the teacher will write their responses on chart paper. Then the teacher reads the book. Then students and teacher discuss the book. Then the class will sing a song about the book, along with some kinesthetics to express the main idea of the story.

Materials:
Vocabulary chart
Fox on Wheels by: Edward Marshall
Chalk board
Paper and pencil

Learner Outcomes:
Students will be able to...

1. Learn new vocabulary from context.
2. Use context clues to decode new words for pronunciation and meanings of unfamiliar words.
3. Locate information by using a Table of Contents.
4. Make and confirm predictions about characters in a story.
5. Listen as teacher reads a story.
6. Identify characteristics of characters in a story.
7. Answer comprehension questions regarding the main ideas of a story.
8. Sing a song using body movements to express the main idea of a story.

Motivation:
Teacher reads short story below:

The Race
Fox went to the **market**
to buy canned fish, called **tuna**.
While Fox was shopping,
he heard his friend Carmen yell,

"**Hooray**! I am glad to see you Fox".
Carmen asked Fox "Do you want to
race your **wheels** in the store?"
Fox told Carmen, "Racing our carts in
the store is not safe and could be
dangerous!" Carmen then gave Fox
a **choice** to race or not to race? Fox
was quiet but then answered,
"Not today Carmen, I have
to get home".

Teacher reads story once then they read it a second time all together as a class. Teacher asks for volunteers to come up to the chart and point out a highlighted word. Then the child reads the word aloud and tells the class its meaning. This should be done for each new vocabulary word (the ones highlighted or different colors on the chart paper). After each word has been identified the teacher raises questions to the class such as:

Which word means "a place to buy food?"
(Market)
Which word means "not safe?"
(Dangerous)
Which word means "Yippee! I'm happy?"
(Hooray!)
Which word means "a kind of a fish that comes in a can?"
(Tuna)
Which word is "something attached to the bottom of a shopping cart that makes it move?"
(Wheels)
Which word means "you can decide between two things?"
(Choice)

AIM: What type of person is Fox? (Curious, inventor, and a risk taker).

Question/Actions	Anticipated Board Notes
Have children locate Fox on Wheels in the table of contents in their reading books.	Fox on Wheels Page 10
Tell children that you will show them how to look at a story before they read it.	
Ask a volunteer to read the title and author.	
Ask children what type of person do they think Fox is going to be?	Chart their responses

Question/Actions	Anticipated Board Notes
Lets read and find out. Teacher reads Fox on Wheels.	
After reading return to chart and let children verify their own predictions. (Allow those who were wrong to fix their predictions).	Check mark or star as predictions are corrected
Ask for volunteer to answer comprehension questions: What does Fox want to do on Saturday? (He wants to have a bike race with his friends.) What does Fox end up doing instead? (He goes shopping for his mother.) What does Mom mean when she says, "hold your horses?" (Wait a minute, stop, or slow down.) What happens when Fox goes shopping at the market? (He and his friend have a race with their carts.) Why does Dexter drop out of the race? (A wheel falls off his cart.) Who wins the race? (Fox.) Why do you think some of the shoppers were angry? (Fox and his friend were racing down the aisles.) What happens when Fox gets home from the market? (His Mom finds out about the race and sends him out to mow the lawn.) How do you think Fox felt about mowing the lawn? (Annoyed or he learned his lesson.) What do you think Fox would rather do instead of mowing the lawn? (Riding his bicycle.) Do you think we could make up a song to go with this story? Teacher goes over the song called wheels	
Split up the class: 1/2 sings Fox's part 1/4 sings Carmen's part 1/4 sings Dexter's part	

Question/Actions	Anticipated Board Notes
(Instructions on written words to the song) (See attached sheet called Wheels Song) Add body movements with each part: Fox's part rolls wheels using hands circular motion and stomping feet. Carmen 's part also rolls wheels using hands and stomping feet. Dexter's part rolls wheels and taps feet very slowly At the end both Fox and Carmen will be racing their feet and hands as they are in a race till the end of the game when the Fox's raise their hands in victory of winning the race. Make sure to sing the song once all together and then split the class into groups. Let the groups change so that all the groups get a chance to sing the part of Fox. Tell students to pull out a piece of paper. Tell them to write a new ending to the story.	

Assessment:

- Teacher will observe student responses when going over vocabulary words and using the contents they are in to define these words.
- Teacher will ask class to use the Table of Contents to locate The Fox On Wheels story. Teacher will observe that students understand and can locate the story in the book.
- Studeats will predict what type of person Fox is? Then the teacher will write down the predictions and confirm them at the end of the story.
- Teacher observes as students follow directions and use their listening skills as the story is being read to them.
- Students assessed with comprehension questions regarding what they learned from the story.
- Sing a song using body movements to express the main idea of a story.
- Have students build a new ending for the story. They can write it in a journal.

Adaptations

Irene
- Key words translated to Spanish
- Peer buddy to help her with song
- Pre-read the story before
- Tape record the song in Spanish then English
- Have Spanish version of the reading
- Vocabulary cards with Spanish translation

Judy
- Vocabulary words gone over prior week
- Peer buddy to help her with song
- Talk to buddy about her predictions
- Listen to confirm or disconfirm her predictions
- State orally to a peer the letters that are in each of the new vocabulary words
- Orally use the words in a sentence.
- Write her name after the prediction that she made.
- Listen to confirm her prediction at the end of the story.
- Be able to retell the story in her own words.
- Have peer translate her version of the story.
- Give her sentences and let her use the vocabulary word that would fit in the space.
- Have peer tell her the word orally and she would have to show the vocabulary card that represented that particular word.
- Assign her a vocabulary word a few days in advance so she could spell, locate, and use it in a sentence if you volunteered her to answer any of these questions.

Kitty
- Peer buddy to go over her part in the song
- Teacher and peers make sure she is on task and ask her questions.
- One-on-one conference with teacher after lesson to see how she did.
- Tape record the story for her to read ahead of time.

Jake
- Monitor own behavior working in his group
- Monitor own behavior while listening to story
- Allow him to write down his own predictions on paper
- Have him be the writer on the board.
- Offer a reward if he uses the proper listening skills he was taught.
- Allow him to share his ideas with a friend.
- He could retell the story to a teacher after the lesson.

Johnny
- Let make up another ending to the story
- List other inventions made with wheels
- Watch video tapes about other types of transportation
- Make a poster of the race

Wheels Song

Attachment B

(Group 1) Fox's wheels ran down the aisle
(Group 1) down the aisle
(Group 1) down the aisle

(Group 2) Carmen's wheels ran down the aisle
(Group 2) down the aisle
(Group 2) down the aisle

(Group 3) Dexter's wheels broke down in the aisle
(Group 3) down in the aisle
(Group 3) down in the aisle

(Groups 1 & 2) Fox and Carmen raced faster down the aisle
(Groups 1 & 2) and faster down the aisle
(Groups 1 & 2) and faster down the aisle

(Group 1) Till Fox won the race!

cc:MSWORKS/LESSON5 By: Suzanne Munguia

Advertisement For The Invention
(Science)
By: Suzanne Munguia (ERIC)

Lesson: Advertisement For The Invention
Unit: Inventions
Grade: Second

Introduction
Students will talk about various types of advertisements. A discussion on what is being advertised, how it is being advertised, and the slogan being used to sell the product will be talked about in class. Original groups of five students will develop their own advertisement for the inventions they created.

Materials
Paper and pencil
Markers/Crayons/Pencils
Poster board provided by the teacher
Magazine and Newspaper Advertisements provided by the teacher
Various other magazines and newspapers
Worksheet "Advertisement".

Learner outcomes
Students will be able to...

1. Describe what various types of advertisements are promoting.
2. Work in cooperative groups and develop an advertisement.
3. Explain some elements that are included in an advertisement.
4. Point out that advertisements are used in various places.
5. Develop an understanding for why inventors advertise their inventions.

Motivation
Put students into groups of two or three. Teacher passes out advertisements from magazines, newspapers, etc. Have children talk about the advertisement in their small groups. Students need to distinguish what the advertisement is trying to sell and the slogan that is being used to sell the particular item. A class discussion is held by the teacher asking for volunteers to show the class what their advertisement looks like, what is being advertised, and the slogan used to try and sell the item.

AIM How can advertisment, be used to promote the sales of a new invention?

Questions/Actions	Anticipated Board Notes
Ask for volunteers to explain what is meant by "Advertise?"	

Questions/Actions	Anticipated Board Notes
The definition of advertise is:	Advertise To call public attention to especially by emphasizing desirable qualities so as to arouse a desire to buy or promote something.
Ask children why we advertise? Lead the discussion by talking about not having advertisement! How would the public know about new products or inventions or old ones if none advertised their items.	
Who advertises their items in such things as magazines, newpapers, journals, in stores, etc.? Lead children to say new inventions need to be seen by the public. Awareness is a big key. Catch the eye of the public. Sometimes old inventions have be modified or improved and the inventor wants to let the public know. Even people who make small inventions advertise in various ways. The key is to let people know about your invention.	
What is the purpose of advertisement? Ask for a volunteer. To sell the invention or item that has been made. It promotes sales and increases the money that comes in. The more people ho know about it, the more sales that can take place. The more product that gets sold, the more money the inventor makes.	
Is advertisment used all over the world? What other places have you seen advertisements or inventors trying to see their products or items? Ask for volunteers in the class. Notice that many famous people are used to promote advertisements. Example is shoes and clothes with sports players. Is there a lot of advertisement being used today?	
Put students in their original inventions groups of five students to a group. Let students develop an advertisement for the invention their group has developed. Students can use any of the materials the teacher has shown them or any other resources they can think of.	
Pass out worksheet, "Advertisement". Make sure	Advertisement Must Include

Questions/Actions	Anticipated Board Notes
worksheet is gone over both orally and in written form. Let students know they will be graded on meeting all the requirements that are being requested to be on their advertisement posters. Each group is responsible for developing their own advertisement poster. Tell class that later in the week we will do an advertisement to promote each groups invention. We will be practicing and then video recording the actual advertisement including their invention and their posters.	Be put on a poster board Name of your invention Cost of your invention A picture of your invention A slogan to sell your invention

Assessment/Summary

Teacher talks to the class at the end of the lesson:

- Today we talked about advertisement and what they are used for. Can anyone give us an example of an advertisement and tell us what the advertisement is trying to do?
- Teacher explains to students that the worksheet is what they will be graded on. Each advertisement must include all of the items listed on the worksheet.
- Ask for a volunteer to tel the class why an inventor would use advertisement? Where would they advertise?
- Let studets know we will be developing our own advetisement and video taping it later in the week.

Adaptations

Irene
- Have key words in Spanish
- Tape record lecture for her to re-listen to later.
- Go over key words on index cards before lecture and after lecture
- She can tell the teacher the words at the end of the day.
- Use pictures for her to identify the words.

Judy
- Look through magazines and point to advertisements
- Verbally explain what is being advertised.
- Work with peer buddy in group to come up with name and slogan for invention.
- Allow her to color the poster or a portion of it.

	Check to see that she wrote her name on the back of the poster
Kitty	I think she will be okay Peer buddy if she needs assistance Peer buddy could explain advertisment articles to her
Jake	Self monitor behavior in his group Make him in charge of making sure everyone is working together. Call on him for a volunteer to answer some of the class questions.
Johnny	Allow him to help write for those who cannot. Let him design his own poster or advertisement Have a teacher and students discussion about what he knows about advertisement. Have him pick an article and talk about it in a paper, then discuss it with his peers.

Advertisement

Name:_____Date: _____

Advertisment's Must Include The Following:

1. Must be put on the poster board provided by the teacher.

2. The name of your invention must be some place on the poster.

3. You must include the cost of your invention on the poster.

4. The advertisement must have a picture of the invention on the poster.

5. There must be a slogan on the poster that advertises your invention.

CC: MSWORKS/Lesso10A By: Suzanne Munguia

Benjamin Franklin
(Social Studies)
By: Suzanne Munguia (ERIC)

Lesson: Benjamin Franklin
Unit: Inventions
Grade: Second

Introduction
Explain to children that Benjamin Franklin is a very famous inventor and has invented many different things. Pass out strips of events that happened in Mr. Franklin's life. Teacher will use props to explain what is meant by each strip. Students are allowed to work in groups of three and predict how the events have taken place in Benjamin Franklin's life. Tell students the sequence of events should start with what they think came first in his life up to what was the last things he did. Teacher will have the children sit on the floor and tell students a story about the life of Benjamin Franklin. Make sure to tell the children to listen for the way the events on their strips have taken place in his life. Then they can confirm their predictions or see how close they were.

Materials
Teacher made strips of events in Benjamin Franklin's life.
Props to represent the strips:
Cross, soap and candles, boat, newspaper, glasses, and a kite or key.
History of Benjamin Franklin book called Benjamin Franklin: A Man With Many Jobs (1988) by Carol Greene.
Overhead projector and pictures to go with the story telling

Learner outcomes
Student will be able to...

1. Predict events that have happened in an inventors life and confirm them after the story telling.
2. Listen to expand their knowledge.
3. Retell main points of story in sequence.
4. Create an awareness of the importance of inventions in our world.

Motivation
To hand out strips of events that took place in Benjamin Franklin's life. Students predict the events and how they took place in his life. Teacher goes over each strip and shows various props to stand for each strip. These are visual cues for the children to watch for or help them remember the events. The strips read as follows and the props used will be listed beside them:

1. At first Benjamin Franklin was going to be a preacher (Cross).

2. Benjamin Franklin made soap and candles working in his father's shop (soap and candles).
3. Benjamin Franklin wanted to go to sea (boat).
4. Eventually Benjamin Franklin opened his own newspaper business (newspaper).
5. One of Benjamin Franklin's greatest inventions was the bifocals which are glasses (glasses).
6. During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

AIM Why do we consider Benjamin Franklin a great inventor?

Questions/Actions	**Anticipated Board Notes**
Teacher tells a story about Benjamin Franklin. (See attached story) Main Points: 1. Born in 1706 2. Lived with parents Josiah and Abian Franklin 3. Lived in Boston Massachusetts (Put on house transparency) 4. Father told him he was going to be a preacher 5. Went to special school and did well, very smart 6. Father decided preachers didn't make enough money so sent Benjamin to another school 7. Did well in writing but terrible at math (Take off transparency) 8. At age 10 Benjamin's father made him quit school and work for his company 9. The father's company made soap and candles 10. Worked their for two years, hot and smelly 11. One day told father, "I want to go to sea!" 12. Father refused to let him go since his brother died at sea because he drowned. 13. Worked for his brother who was an apprentice (Put on table and sharing transparency) Benjamin liked to share his ideas with friends. They would get together and play with his inventions. 14. He hated it and did not get along with his brother 15. His brother gave him the dirty jobs and beat him up 16. He bought a lot of books and enjoyed reading. (Take off transparency). 17. At age 17 he became frustrated and bored and he ran away from home. 18. He moved to Philadelphia Pennsylvania where he worked for another apprentice of a printshop.	

Questions/Actions		Anticipated Board Notes
19.	He knew a lot about the printing business	
20.	Eventually Benjamin opened his own store and his own newspaper business.	
21.	In 1730 he married a woman named Deborah Read	
22.	He went on to start his own library, a fire department, he wrote about science and did many science experiments, he even invented a stove that gave off lots of heat.	
23.	One of his greatest inventions was the bifocals or what we know of as glasses. These were certain types of glasses that allowed people to read up close.	
24.	Benjamin and Deborah eventually had three children of their own.	
25.	The middle child, Frances, died at a very young age from smallpox.	
26.	Benjamin Franklin did not have her immunized because at the time he thought it was harmful and dangerous for children to get immunized.	
27.	During this time he was upset and sad about loosing his daughter to smallpox. He worked on promoting all children having to be immunized. (Put in transparency).	
28.	One day he decided to put a big box on top of a high storage building. He proceeded to put a iron rod in the box and have a man stand in the box during a thunderstorm.	
29.	Lightening struck the rod and this was how he discovered electricity. (Take off transparency). He also experienced with lightening by tieing a wire to the top of a kite and a key at the other end of the string that was help by the kite. He flew the kite at another thunderstorm and his idea worked. The lightening struck the wire and created electricity. Benjamin felt the shock through the key when it was hit be lightening.	
30.	At age 70 Benjamin Franklin helped work on the Constitution of the United States. This was his last big job before he died at the age of 84. (Put in transparency).	
31.	Benjamin was a very famous inventor and he was very intelligent and invented many things. Today we can all remember Benjamin Franklin whenever	

Questions/Actions	Anticipated Board Notes
you see a hundred dollar bill. Benjamin Franklin is on the hundred dollar bill.	

Assessment/Summary

- Students will predict what will happen in the lifespan of Benjamin Franklin by using strips of events the teacher passes out. The predictions will be confirmed at the end of the story. Observation by the teacher will be used as an assessment.
- Teacher will assess by observation if students are using listening skills they have learned in previous lessons.
- Students will use the strips of events to retell main points that took place in Benjamin Franklin's life. Teacher will observe to keep students of task or ask them questions.
- Teacher will generate questions to the class:
  1. How many of us believe that Benjamin Franklin was a famous inventor?
  2. Ask a few no's why and a few yes' why?
  3. Someone give us an example of an important invention Benjamin Franklin hás created and explain to the class why it is import to our world? (electricity, glasses, newspaper).

Adaptations

Irene
Pre-taped story for her review in Spanish
Peer buddy to work in groups
Key words in Spanish
Have her point to and say the word of the props used
Orally have her say the order of the sequenced events
Put the props in order to the sequence that took place in the story
Vocabulary card with words and pictures to help her say the words
Peer could quiz her on the flashcards a few days before the storytelling

Judy
Peer buddy in her small group
Put the props in the order of the events took place
Point to how she would predict the events to happen in the beginning
Peer to read back her predictions and help her confirm them
Point to the props and tell the sequence of the events that took place.
Have her alphabetize the props and write them down in correct order.
Orally have her say the proper sound that each of the props starts with.
Tell teacher her versions of what made Benjamin Franklin a famous inventor.
Provide an organizer for her to follow as teacher tells the story.

Kitty	Provide written as well as oral directions Preview any unknown vocabulary Peer buddy to read the strips of events to her Provide a graphic organizer for her to follow as story is being told
Jake	Monitor behavior and appropriate behavior during listening time Monitor behavior and group collaboration work Self monitoring as well as teacher monitors After lesson talk with teacher about how behavior went Rewards for appropriate behavior Free recess time at the end of the day Plenty of praise if behavior is appropriate
Johnny	Make a poster of Benjamin Franklin or one of his inventions Draw a picture of one of his inventions Help other students with writing assignments Give more sequenced events for him to put in order Retell the story in his own words Do a journal entry on what he thinks was the most important inventions that Benjamin Franklin made and why? Sequence the inventions that took place in order from earliest to latest.

Source:

Greene, Carol (1988). Benjamin Franklin: A Man With Many Jobs. Chicago, Children's Press.

Benjamin Franklin

Benjamin Franklin was born in 1706. In 1713 he lived in Boston Massachusetts with his parents. His parents were Josiah and Abian Franklin. Mr. Franklin told 7 year old Benjamin that he was going to be a preacher when he grew up. In Boston Benjamin attended a special school. He was a very smart boy and did well at this school. A year later Benjamin's father changed his mind and decided that preachers didn't make enough money. At this time his father moved him to another school. At the new school he learned to write well, but failed arithmetic.

At the age of ten Mr. Franklin made Benjamin quit school and work in his company. The company made soap and candles. This hard smelly work went on for two years. One day Benjamin told his father, "I want to go to sea!". His father refused and said his brother had drowned at sea. Mr. Franklin insisted that Benjamin stayed in Boston. He told Benjamin he could become a brick layer, or work with metal, or be an apprentice. Benjamin's brother James was an apprentice. Benjamin worked for his brother but he was not happy there. He got bored. Benjamin would write poems and practiced his math skills tell he got good at math. He practiced swimming and did fancy tricks. He stopped eating meat for a short time so he could afford to buy books. He read many books during this time of his life. Benjamin's brother would give him the boring jobs, and beat up on him.

Finally, at the age of 17, Benjamin became frustrated and confused so he ran away from home. He went to Philadelphia Pennsylvania were he worked for a print shop for a while. He then started his own printing shop. He owned his own store and a newspaper. In 1730 he met Deborah Read and married her. He started a library, a fire department, he wrote about science and did science experiments, he invented a stove that gave off lots of heat. One of Benjamins greatest inventions was the invention of the bifocals or glasses that people used to read up close material.

Deborah and Benjamin went on to have three children whoes names were William, Frances, and Sarah. Frances died at a young age. She was five when she died of smallpox. Benjamin refused to get her shots for smallpox when she was young. He thought they were harmful to children. Benjamin was very upset and was always living with the fact that he never had his child immunized for

smallpox. During these tough times Benjamin just studied and worked on becoming a better person.

One day he decided to put a big box on top of a high building and then put an iron rod in the box. Then he had a man stand in the box during a thunderstorm. Lightening struck the rod. It was how he discovered electricity. Benjamin also put a wire at the top of a kite. He tied a key at the end of the string. The he flew the kite during a thunderstorm. His idea worked. Lightening struck the wire. Benjamin felt the shock through the key when it was hit by lightening.

At age 70 Benjamin didn't feel very well. Working on the Constitution of the United States was Benjamin's last big job before he died. At age 84 Benjamin Franklin became sick and died in Philadelphia Pennsylvania.

Source:

Greene, Carol. Benjamin Franklin: A Man With Many Jobs (1988). Chicago: Children's Press.

At first Benjamin was going to be a preacher.

At first Benjamin was going to be a preacher.

At first Benjamin was going to be a preacher.

At first Benjamin was going to be a preacher.

At first Benjamin was going to be a preacher.

Benjamin Franklin made soap and candles working in his father's shop.

Benjamin Franklin made soap and candles working in his father's shop.

Benjamin Franklin made soap and candle working in his father's shop.

Benjamin Franklin made soap and candles working in his father's shop.

Benjamin Franklin made soap and candles working in his father's shop.

Benjamin Franklin wanted to go to sea.

Benjamin Franklin wanted to go to sea.

Benjamin Franklin wanted to go to sea.

Benjamin Franklin wanted to go to sea.

Benjamin Franklin wanted to go to sea.

Eventually, Benjamin Franklin opened his own newspaper business.

Eventually, Benjamin Franklin opened his own newpaper business.

Eventually, Benjamin Franklin opened his own newspaper business.

Eventually, Benjamin Franklin opened his own newpaper business.

Eventually, Benjamin Franklin opened his own newpaper business.

One of Benjamin Franklin's greatest inventions was the bifocals which are glasses.

One of Benjamin Franklin's greatest inventions was the bifocals which are glasses.

One of Benjamin Franklin's greatest inventions was the bifocals which are glasses.

One of Benjamin Franklin's greatest inventions was the bifocals which are glasses.

One of Benjamin Franklin's greatest inventions was the bifocals which are glasses.

During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

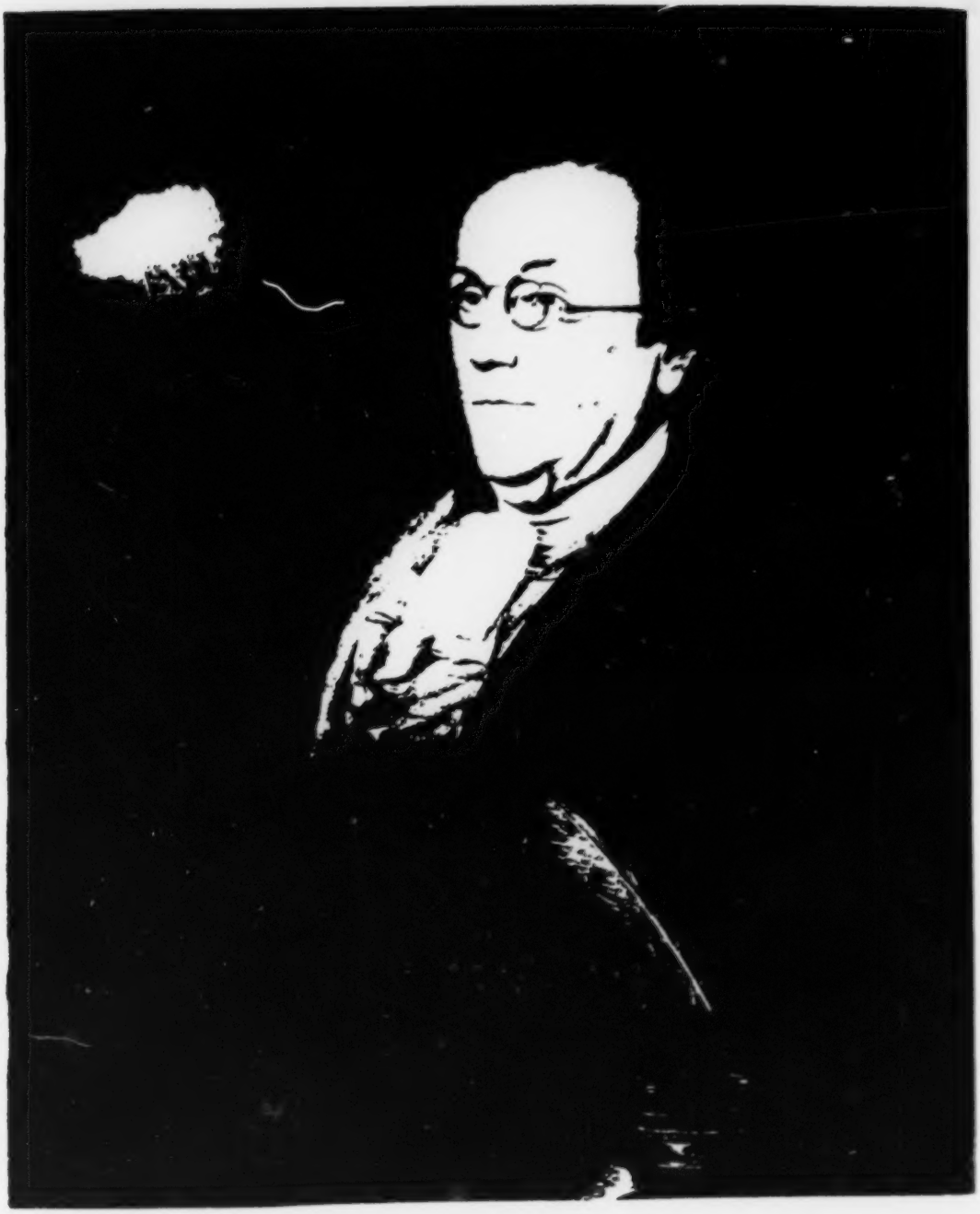
During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

During a thunderstorm Benjamin Franklin flew a kite which was one idea that led him to the invention of electricity.

Benjamin liked to do experiments and show them to his friends.

BEST COPY AVAILABLE



Tow Trucks
(Reading)
By: Suzanne Munguia (ERIC)

Lesson: Tow Trucks
Unit: Inventions
Grade: Second

Introduction
The book, How Many Trucks Can A Tow Truck Tow by: Charlotte Pomerantz will be introduced to the students. The teacher will ask for a couple of volunteers to tell the class what they think this book is going to be about? Teacher then reads the book. Then pass out the ing hand held cards (one to each student). Teacher reads the story again and students raise their ing cards every time they hear a word that ends with ing. There is a short discussion about the book after reading it the second time. A song about the book will be sang several times by the class. A poem will then be wrote to represent what they learned from the book they read.

Materials
Book, How Many Trucks Can A Tow Truck Tow By: Charlotte Pomerantz
Paper and Pencil
ing cards prepared by the teacher
Copy of the song to each child
An example poem
A worksheet called, Creating My Own Poem

Learner outcomes
Students will be able to...

1. Predict events that will take place in a story.
2. Listen and participate in class discussion.
3. Identify and respond with cue cards to words ending with ing.
4. Sing a song dramatizing the main points in a story.
5. Write an acrostic poem that follows a correct order.

Motivation
Ask for a few volunteers to predict what they think the story is going to be about? The teacher charts their answers and initials by each childs response. Then the teacher tells the students we are going to listen as she reads the book. The teacher introduces the book and author or can ask for a volunteer to read it to the class.

AIM What does a tow truck do?

Questions/Actions	Anticipated Board Notes
Teacher talks to the class about the story and may ask some of these questions: 1. What does a tow truck do? 2. Can anyone explain how the tow truck tows a vehicle? 3. Does everyone know what a tow truck looks like? 4. Why do people need to call a tow truck? 5. Have you ever called a tow truck? 6. Where do tow trucks live? 7. How many trucks did this tow truck tow? 8. Do you think a tow truck can really tow this many trucks at one time? Teacher tells students we are going to read the story again and this time we will raise our ing cards every time we hear a word that ends with ing. Teacher reads the story. Teacher asks for volunteers to tell the class some of the ing words that were used in this story. She charts them on the paper.	<u>ING Words</u> working, morning, turning, winking, burning, blinking, towing, swinging, dangling
Tell students we are going to sing a song. Walk through the song once with the children. Ask the students to think of dancing or dramatized actions we could put with the verses of the song. Pick some actions to use to sing along with the song. Pass out copy of the song! <u>How Many Trucks Can A Tow Truck Tow?</u> "How many trucks can a tow truck tow? One? Two? Three? four? I don't know. But I', sure as I'm sure I'm a little tow truck that a tow needs a tow when it's down on its luck." First time the song plays it is very slow, then it gets	

Questions/Actions	Anticipated Board Notes
faster. Then the last time the music is there, but no words are included. (I have a cassette tape for the song). Go back to chart and confirm or disconfirm the predictions. Put a check mark by those correct, and allow the students who were wrong to come up and fix their answers. Tell the students they are going to compose their own acrostic poem using the pattern that you provide for them. Use teacher's example to explain format to them. Hand out the worksheet, Making My Own Poem. Explain the format of naming it tow truck, then describing it using three words adjectives, next they describe it again using three of the words that end with ing, and the final line is what they named it (their own name).	Acrostic Poem Example Tow Truck loud and large Rolling, Bumping, and Moving Helpful and busy machine.

Assessment/Summary

- Teacher will talk with class about their predictions and what really happened at the end of the story. Teacher will be observing as she assesses how students predicted and confirmed or dis-confirmed their predictions. Teacher will also be observing that students are following directions and using their listening skills.
- Teacher will observe that students are participating using their response cards.
- Students will sing a song about the toe truck story and teacher observes who is participating and who is not.
- Teacher let student compose their own poems following a pattern. Teacher uses this as a assessment to their understanding of following a pattern to construct a poem of their own.

Adaptations

Irene — Tape record the story for her to listen to a few days prior to the reading in class.

Key words in Spanish
Have a peer go over key words with her prior to reading the story.
Explain to her the song and the ing ending game before it is done in class.
Pass out a guideline for her to follow as the lesson goes on.
Give her the song written in Spanish as well as English
Let peer buddy transcribe her poem
Peer do the responses to the writing for her.

Judy

Make tape recording of song and story ahead of time for her to review.
Let peers transcribe for her.
Make sure she writes her name and can identify where she put it on the papers.
Have her point out all the words in the song to a peer that have the "t" sound.
Have her verbally come up with some words that make the "t" sound herself.
She could only respond to five of the ing words while the story is being read.
Have a peer dictate her ideas and write them down for her.
She could read the story to a peer.
Have her read the story to a kindergarten buddy

Kitty

Have a peer dictate her ideas and write them down on paper.
She could conference with teacher when she is stuck or needs help.
Could tape record the reading lesson ahead of time for her to review.
Have her read the story herself and tape record it.
Let her use a lab top computer to do her work.
Use pictures to help her follow the story.
Have a peer read her the story again.
Have her volunteer to tell the class one ing word she noticed in the reading.

Jake

Go over the listening skills with him prior to reading.
Teacher and self monitoring of listening and behavior.
Put him with a peer buddy so he can read to keep busy.
Call on him to volunteer to tell the class some of the ing words he found.
Let him read his poem to a peer or the teacher.
Have him draw a picture of his own toe truck.
Let him know he should be acting appropriately and listen in class.
Give praise and positive comments when listening and proper behavior is taking place.

Johnny

Let him write down the ing words on the board.
He can create his own poem with no format.
Let him read his poem to the class.

He can make a picture to represent his poem.
Tell him ahead of time the song we will sing so he can try to come up with actions that could represent the song.
Conference with him about what he knows about toe trucks.

How Many Trucks Can A Tow Truck Tow?

"How many trucks
can a tow truck tow?
One? two? three? four?
I don't know.
But I'm sure as I'm sure
I'm a little tow truck
that a tow needs a tow
when it's down on its luck."

How Many Trucks Can A Tow Truck Tow?

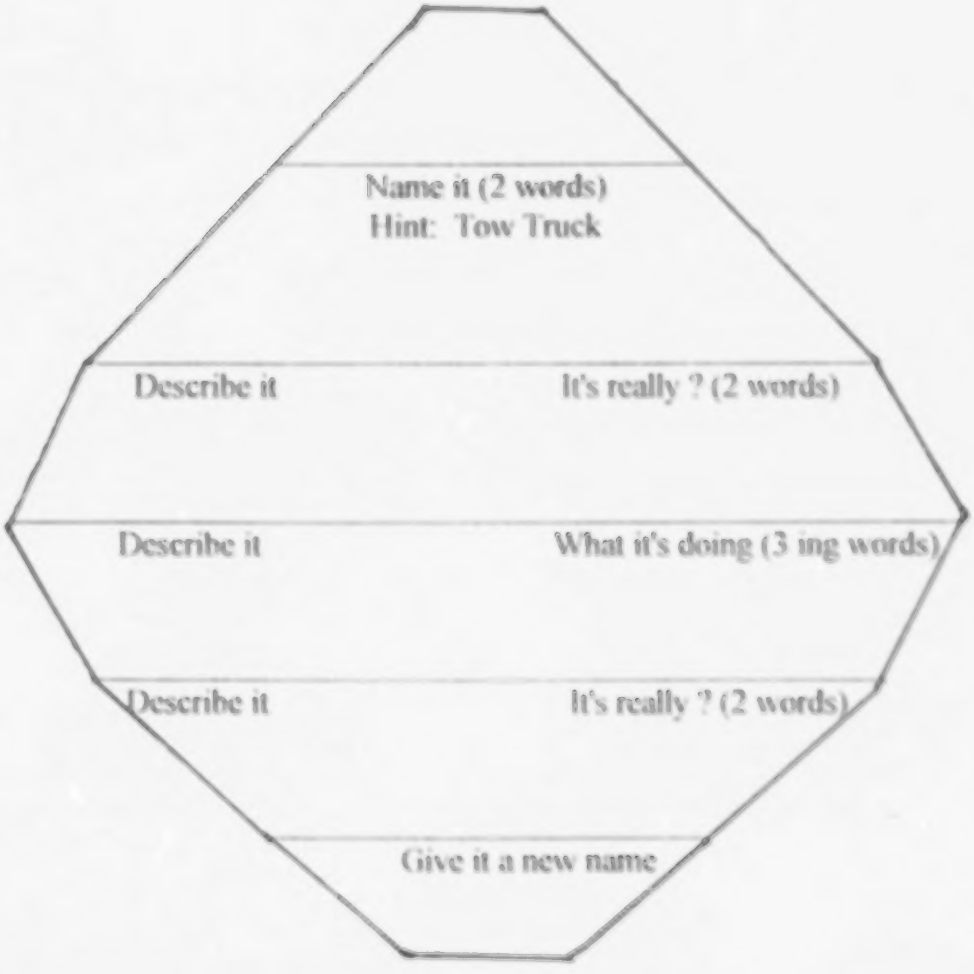
"How many trucks
can a tow truck tow?
One? two? three? four?
I don't know.
But I'm sure as I'm sure
I'm a little tow truck
that a tow needs a tow
when it's down on its luck."

cc:MSWorks/truck By: Suzanne Munguia

Creating My Own Poem

Name:_____ **Date:**_____

Example: Tow Truck
loud and large
rolling, bumping, and moving
helpful and busy
machine



cc:MSWorks/lesso13b By: Suzanne Munguia

There Goes the Truck
(Social Studies)
Movie: 35 min.

Name: Renee Gonzales
Theme: Inventions
Concept: Transportation
Grade: 2

Learner Outcomes: At the end of the lesson the students will be able to:

1. describe different sizes and shapes of trucks.
2. give examples of common uses for trucks.
3. discuss safely rules given by truck drivers.

Motivation:

Remember when we talked about the invention of the wheels on Tuesday. Today we are going to watch a video on "Trucks." You need to pay close attention the different sizes and shapes of the trucks and how these trucks are used. Also pay close attention to some of the rules given by the truck drivers. After we watch the video I will ask you questions about trucks.

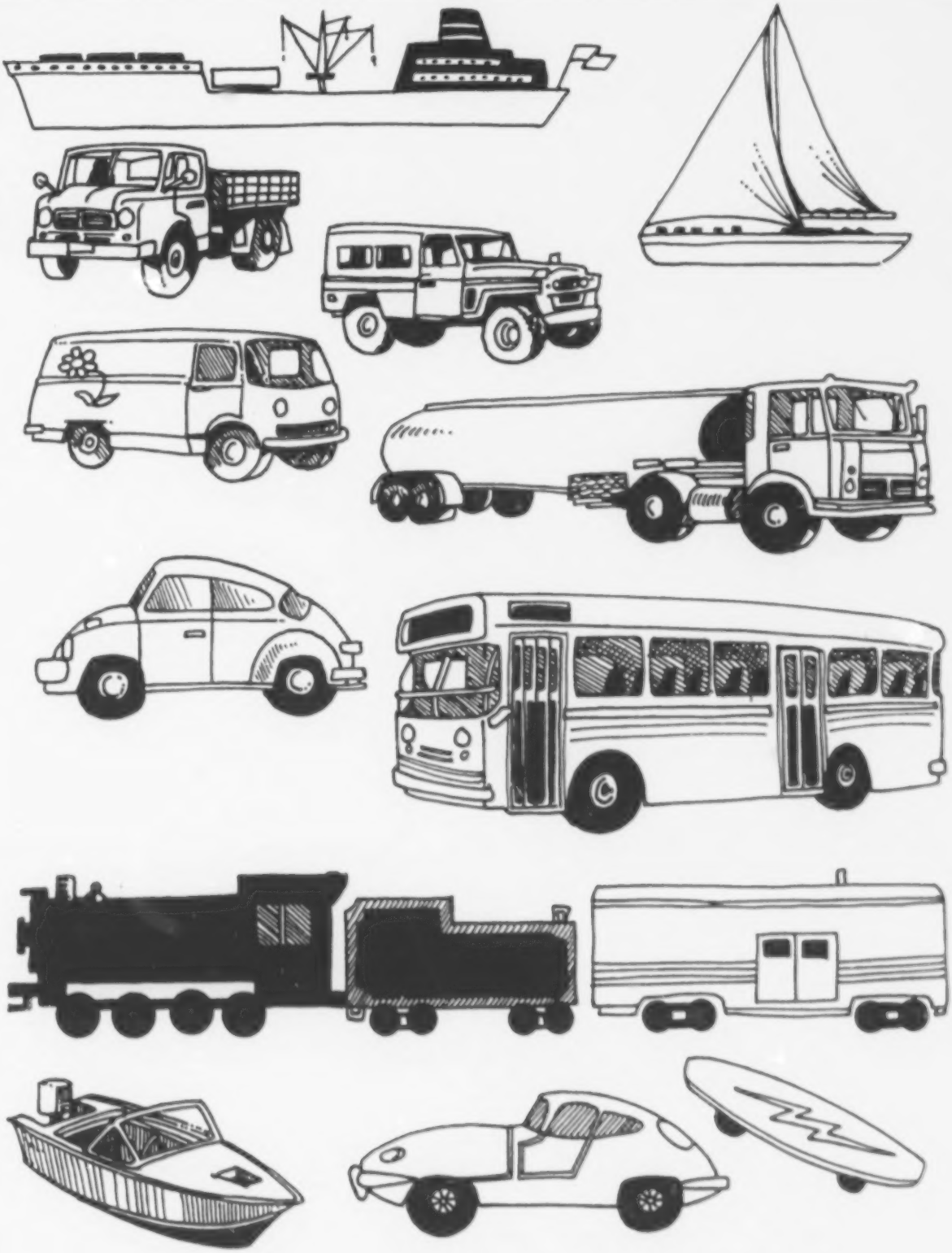
Materials:

Video: There Goes A Truck
Genre: nonfiction
Bibliographic information: A Vision Entertainment and Power To Create. Kid Vision, 1994. (Ages 3-8).

Questions /enrichment	Anticipated notes
What size of trucks were in the video?	I. What size of trucks were in the video?
	A. Small
Write responses on overhead	B. Medium

or chalkboard	C. Large
Call on students randomly for answers after stating questions.	
How were some of the trucks shaped?	II. What were some of the shapes of the trucks A.
Can anyone come up and draw a shape?	B. C. D. E. F. other
What are some common uses of trucks?	III. What are common uses ? A. moving B. sanitation C. everyday transportation D. tow truck E. fire truck F. military use G. snow plow H. Aerial bucket truck (fix street lights) I. tractors J. street cleaners K. entertainment (monster trucks)
What are some of the safety rules truckers talked about?	IV. What are some of the safety rules truckers talked about?

Other Transportation



92

Copyright © 1988, Good Apple, Inc.

A. watch for blind spots.

B. keep distance away when driving

C. be careful around big trucks

Summary:

1. Describe different sizes and shapes of trucks.
2. Give examples of common uses of trucks
3. Discuss safety rules given by truck drivers.

Comments/ Evaluation of Lesson:

Adaptations:

Irene: Translate key ideas from video into Spanish or have her listen to an audio tape video in Spanish. Give her a peer tutor to help her answer questions.

Judy: Calll on Judy first to answer answer questions. Assign her a peer tuttor.

Kitty: noin needed.

Jake: Put him on a behavior modification checklist during video, or in seat, independent work. Reward good behavior with praise/coupons and punish with consequences listed in class rules.

Johnny: Have him research trucks before lesson. He could share his information found after lesson. He could also help with bringing in pictures on trucks. He could also invent a new use for a truck.

Roller Skates
(Reading)
By: Suzanne Munguia (ERIC)

Lesson: Roller Skates
Unit: Inventions
Grade: Second

Introduction
Teacher will enter the room dressed like a roller skater (have roller skates, knee pads, and a helmet on). Teacher asks children if they own a pair of roller skates. Teacher makes up questions to discuss with children about roller skates. Teacher asks students what do they think the book we are reading is going to be about? Students will work with a partner and read the story, Roller Skates. Groups will be picked randomly by the teacher. After reading the story the teacher will have students cut out, color, and paste their own paper roller skate together. The wheels of the roller skate will list six different types of transportation that uses wheels and the other wheel will include a sentence telling something about the story.

Materials
Paper copies of the book, Roller Skates by Stephanie Calmenson
Paper and pencil
Colored paper, crayons, paste or glue
Teacher gives roller skate pattern to students
Sample wheels for students to trace circles
Teacher needs roller skates, knee pads, and helmet

Learner outcomes
Students will be able to...

1. Relate author's idea to their own experiences.
2. Read in small groups for enjoyment and use visual cues to understand the story.
3. Follow a set of multiple oral directions.
4. Participate in teacher directed writing activity.
5. Compose simple sentences expressing expanded thoughts.
6. Listen to discussion to expand their knowledge.

Motivation
Teacher will start a class discussion about roller skates! Who has roller skates? Who likes to roller skate? Where do you roller skate? Ask for volunteer to tell how the roller skate is made? Why do we use roller skates? Is it a form of transportation? (transportation, in the Price Club, entertainment, get to work, friends go to school). Are there other forms of transportation? What do you think the roller skate would be like if it

didn't have wheels on it? Wheels have been put on many things. The invention of the wheel has been used in a lot of ways. Today we are going to read the book called, Roller Skates, by: Stephanie Calmenson.

AIM How has wheels impacted the transportation world?

Questions/Actions	**Anticipated Board Notes**
Teacher asks for a volunteer to re-read the title of the book and the author. Teacher gives out oral directions: 1. Teacher pairs the students with a partner. (Grouping can be random or the teacher can pick the partners) 2. Partners will read the book taking turns reading a page at a time. 3. Both partners should be paying attention to the story because we will do an activity after we read the story. 4. If you are done reading before others finish homework or assignments that are not completed. 5. Please be respectful and keep your voices down so other groups do not get disturbed. After students have read the story teacher leads a class discussion: For random calling on students we put all the students' names in a coffee can and picked out names. These students answered the questions. 1. Who can tell us what this story is about? 2. How did Sam Skipper get all these roller skates. 3. What did he do to get rid of all the skates? 4. Did people buy the skates? 5. What did the towns people do on the skates or some of the people when they bought the skates? 6. How much do you think Sam sold the skates for? 7. How much do you think they are worth? 8. Are there more than one type of roller skate? (fisher price, boots, roller blades, gym shoes, slip on). 9. Are roller skates a form of transportation? 10. What other forms of transportation have wheels?	Roller Skates By: Stephanie Calmenson

Questions/Actions	Anticipated Board Notes
11. Has wheels really been an invention that has effected out world? 12. Does anyone know who invented the roller skate? 13. Before the roller skate was invented ice skating was popular. The roller skate was developed after the ice skate. For many years inventor tried to create a skate with wheels instead of a blade that could be used on land. In 1863 J. L. Plimpton created the four-wheel "truck". Today we call them roller skates. Students can start putting together their own roller skate. Instructions are to cut out the roller skate on the hand out the teacher passes out. With circular patterns the students cut out wheels. The need six pieces of white paper behind each wheel. If they fold three pieces of paper in half then they can have twelve circles in all. Tell students to write six different forms of transportation that require wheels. Each of the six pages should list one form of transportation. The other wheel should be a complete sentence about a major part of the story. Each page has to have at least one word on it. So the mininum of six words in the sentence.	

Assessment/Evaluation

- Students will read-in small groups and use visual cues to read the story with their partner. The teacher will be observing that all children are participating.
- Teacher will have a class discussion to tell students understood the story. Teacher will have comprehension and higher level thinking questions for the students. Class will talk about the invention of the roller skate.
- Teacher will pass out cut out for students to make their own roller skate
- The roller skate will have two wheels with six pieces of paper in each wheel. The wheel on the left will list six different forms of transportation that have wheels. The wheel on the right of the skate will be a complete sentence starting with a capitol letter and ending with a period. The sentence can have a minimum of one word per page. Students must use all the pages and have one complete sentence related to what they read in the story.

- If students complete the assignment then they understood the oral directions. Teacher will be walking around the room observing and answering questions

Adaptations

Irene
Key words in Spanish
Tape record story prior so she can review earlier
Peer buddy
Have written as well as oral directions in Spanish
Vocabulary cards for her to review a few days prior to reading.
Have a peer do the writing of her words for her.
Have her re-read the words someone else wrote back to that person

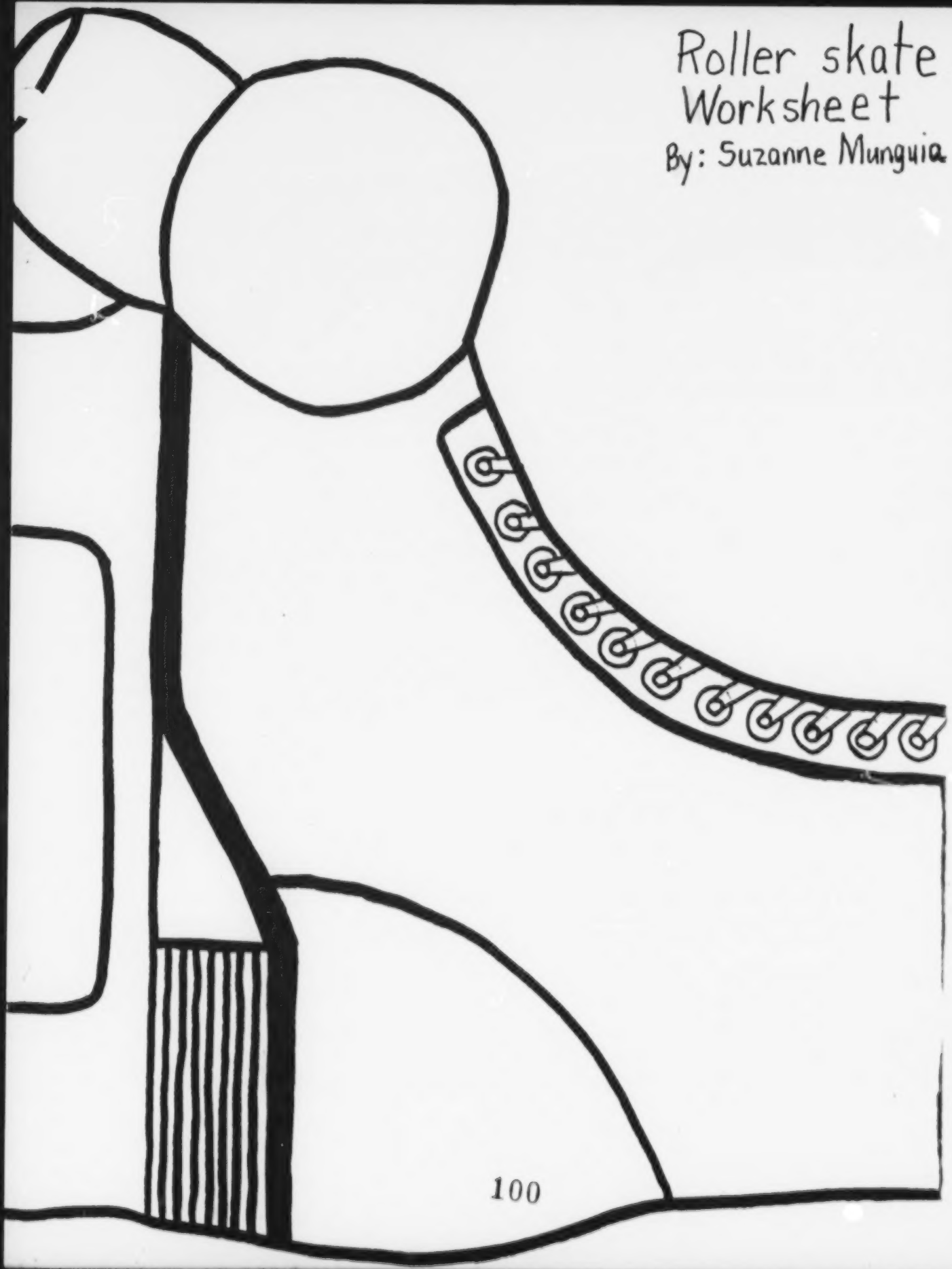
Judy
Peer buddy read her the story
Draw a picture of roller skates
Explain to her buddy her experiences with roller skates
Have peer translate and write down her ideas in the wheels
Have re-read the writing by the peer.
Let her point to forms of transportation and say the word
Make her write her name on her paper
Teacher conference afterwards to see that she understood the story
Teacher conference and ask her if she likes to roller skate?
Have her point to and say the word roller skates.
She could color and make her own roller skate.
Have her orally say the letters in the word roller skate.
She could tell the teacher a story about roller skates.
Her partner will have to read the whole story to her.
Give her, her own copy to follow along with reader.
She could try and re-read the story to her peer using the visualize pictures in the book.
She could point to the words as the reader reads the story so she can follow along with the reading.

Kitty
Tape record the story and have her preview it prior
Peer buddy to help her understand the story
Prepare her to be listening for one question the teacher will ask her to answer at the end of the story.
Peer buddy would have to explain the story to her if she did not understand.
Using the picture cues Kitty could re-read the story a second time to her peer.
Let her pre-read the story a day before the reading.
Do flashcards with her the day before the reading to make her notice the words and understand the story better.
Teacher conference to make sure she understood the main story.

Jake	Self monitor behavior Monitor group work with self monitoring sheet Let him read to one of those who cannot read. Teacher observes behavior and attitude and praises when appropriate Volunteer him to answer some comprehension questions. Keep him on task and observe and prompt him to start work immediately
Johnny	Create his own story about roller skates Research more about the history of the roller skates Read another book about roller skates Ask him to explain to the class how the roller skate was made. He could map the route that he would take from school to his house. Design a part putting in a road or track for roller skating. Build a new type of roller skate.

Roller skate Worksheet

By: Suzanne Munguia



CULMINATING ACTIVITY
(Technology/Language Arts/Drama/Art/)
VIDEO ADVERTISEMENT

Name: Renee Gonzales and Suzanne Munguia
Theme: Inventions
Concept: Technology-- invention advertisement
Grade: 2

LEARNER OUTCOME: At the end of this lesson the students will be able to :

1. learn the importance of selling an invented product to the public.

MATERIALS:

Video camera

VHS tape

advertisement poster

students

MOTIVATION:

At the completion of your invention you will create a poster advertisement of your invention. Then when that is completed you will make a commercial to advertise your invention. At the completion of this video taping we will share this tape with other second grade classes and send then the tape to your writing buddies in Chicago.

ASSESSMENT:

Check for good organizational skill of group and good communication skills. Also see if commercial was persuasive.

References For Inventions Unit
By: Suzanne Munguia

Caney's, Steven (1985). Invention Book. New York, Workman Publishing.

Carlson, Laurie (1990). Kids Create! Vermont, Williamson Publishing.

d'Estaing, Valerie-Anne Giscard (1985). The World Almanac Book Of Inventions. New York, World Almanac Publications.

d'Estaing, Valerie-Anne Giscard and Mark Young (1993). Inventions And Discoveries 1993; What's happened, What's Coming, What's That? New York, Facts On File.

Goldfluss, Karen J. and Patricia Miriani Sima (1993). Thematic Unit Inventions. CA, Teacher Created Materials, Inc.

Harris, Tina, Deborah Nourse Lattimore, Erica Silverman, and Anne F. Wittels (1986). Inventions And Discoveries.

Heath Reading (1989). Teacher's Edition Come Back Here Crocodile. Lexington, DC Heath and Company.

Jones, Charlotte Foltz (1991). Mistakes That Worked. New York, Doubleday Book For Young Readers.

Lambert, David and Tony Osmond (1987). Great Discoveries And inventions; The World Of Science. New York, Facts On File Publications.

McAleer, Franny Forrest (1987). Science & Inventions; Book B. CA, Opportunities For Learning, Inc.

National Geographic Society (1988). Inventors And Discoverers Changing Our World. Washington, D.C., national Geographic Society.

Platt, Richard (1994). Smithsonian Visual Timeline of Inventions. New York, Dorling Kindersley.

Publishers of *Yankee* Magazine (1989). The Inventive Yankee; From rockets to roller skates, 200 years of Yankee inventors & inventions. New Hampshire, yankee Books.

Redleaf, Rhonda (1987). Teachables II; Homemade Toys That Teach. United States, Toys 'n Things Press.

Rogulic-Newsome, Lisa (1991). Theme of the Week: A Week-by-Week Collection of Multidisciplinary Activities Stressing Brainstorming and Creative Thinking. Illinois, Good Apple.

Spivack, Doris and Geri Blond (1991). Inventions & Extensions: High-Interest, Creative-Thinking Activities. TN, Incentive Publications, Inc.

Stanish, Bob and Carol Singletary (1987). Inventioneering: Nurturing Intellectual Talent in the Classroom. Illinois, Good Apple, Inc.

Stewart, Don (1987). Wild, Wacky, & Wonderful Inventions Patented during the Mid Eighteen Hundreds. Arizona, The Western Printer.

Taylor, Caroline (1985). Intermediate Transportation Social Studies. California, Creative Teaching Press, Inc.

There Goes A Truck (1994). New York. A Vision Entertainment and Power To Create Kid Vision (Ages 3-8).

Torrence, Janice and Sue Nations (1991). Why Didn't I Think Of That? Exploring The World Of Inventors And Inventing. The Mailbox. April/May issues. The Education Center, Inc.

Wile, Fredrick William (1974). Emile Berliner. New York, Arno Press.

Literature for Children
References

Bedik, Shelley (1995). Thomas Edison Great American Inventor. New York, Scholastic, Inc.

Calmenson, Stephanie (1992). Roller Skates! New York, Hello Reader - Level 2 Scholastic Inc.

Du Bois, William Pene (1966). Lazy Tommy Pumpkinhead. New York, Harper & Row, Publishing.

Greene, Carol (1988). Benjamin Franklin: A Man With Many Jobs. Chicago, Children's Press.

Hudson, Wade (1995). Five Notable Inventors. New York, Scholastic Inc.

Lawson, Robert (1988). Ben and Me. Canada, Little Brown and Company.

Martin, Ann (1995). Tonka: Building The New School. New York, Scholastic Inc.

McNaught, Harry (1978). The Truck Book. New York, Random House.

Petrie, Catherine (1982). Joshua James Likes Trucks. Chicago, Childrens Press.

Pomerantz, Charlotte (1987). How Many Trucks Can A Tow Truck Tow? New York, Random House, Inc.

Rissing, Karen (1994). Cars and Trucks. New York, Modern Publishing A division of Unisystems, Inc.

Robbins, Ken (1993). Power Machines. New York, Henry Holt and Company.

Scarry, Huck (1981). On The Road. New York, Putnam Publishing Group.

Snapshot (1994). Things On Wheels. New York, Snapshot.

Wilson, Sarah (1991). Garage Song. New York, Half Moon Books.

SE056736

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Inventions	
Author(s): Suzanne Munguia & Renee Gonzales	
Corporate Source: Asu West	Publication Date: 5-9-95

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

☒ ← Sample sticker to be affixed to document

Check here
Permitting microfiche (4" x 6" film), paper copy, electronic, and optical media reproduction

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 1

Sample sticker to be affixed to document → ☐

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 2

or here
Permitting reproduction in other than paper copy

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Suzanne Munguia	Position: Student
Printed Name: Suzanne Munguia	Organization: Asu West
Address: P.O. Box 4103 Cave Creek, AZ 85331	Telephone Number: (602) 993-7527
	Date: 6-9-95

OVER

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of this document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS).

Publisher/Distributor:	
Address:	
Price Per Copy:	Quantity Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name and address of current copyright/reproduction rights holder:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC/CSMEE
1929 Kenny Road
Columbus, OH 43210-1080

If you are making an unsolicited contribution to ERIC, you may return this form (and the document being contributed) to:

ERIC Facility
1301 Piccard Drive, Suite 300
Rockville, Maryland 20850-4305
Telephone: (301) 258-5500

(Rev. 9/91)